

with much difficulty owing to the surf, though the sea was very calm. On the loch were great flocks of Red-throated Divers. I counted 69 in front of me, and there were twice that number in the distance. Very striking also was the number of Arctic Skuas, and amongst them were several Great Skuas. As many as a dozen would sit within gunshot of me at one moment. The only other inhabitants of this dreary waste were a few Great Black-backed Gulls and hundreds of Arctic Terns, on the proceeds of whose fishing the Skuas probably lived.

The following morning I landed again, hoping to explore further, but, though there was no wind, the swell had increased, and after taking a few photographs I was compelled to leave. The dinghey was half filled with water and nearly upset, but we got off with the loss of an oar, and I was sorry that the fear of rising wind deterred me from further exploring this remarkable place. The only bird added to my list of the previous evening was the Great northern Diver.

After a visit to a whaling-station I left Iceland.

II.—*On Birds from the Northern Portion of the Malay Peninsula, including the Islands of Langkawi and Terutau; with Notes on other rare Malayan Species from the Southern Districts.* By HERBERT C. ROBINSON, C.M.Z.S., M.B.O.U., Director of Museums, Federated Malay States, and CECIL BODEN KLOSS, F.Z.S., M.B.O.U., Curator, Perak State Museum.

[Concluded from 'The Ibis,' 1910, p. 675.]

(Plate I. and Text-figs. 5 & 6.)

#### RALLIDÆ.

##### 12. RALLINA SUPERCILIARIS.

*Rallina superciliaris* (Eyton); Sharpe, Cat. Birds Brit. Mus. xxiii. p. 76 (1894).

Distinctly rare in the Peninsula and not improbably

migratory. A male was obtained on Langkawi in February 1909.

13. AMAURORNIS PHÆNICURA.

*Amaurornis phœnicura* (Forst.); Sharpe, tom. cit. p. 156.

Common in Trang and in Langkawi, as throughout the Peninsula, in swamps, and especially among the thick and tangled vegetation on the banks of rivers flowing through more or less cultivated ground. The Malay name for the bird in the south is *ayam ayam*, which may be translated "a kind of a hen"!!

LARIDÆ.

14. STERNA BERGII.

*Sterna bergii* Licht.; Saunders, Cat. Birds Brit. Mus. xxv. p. 89 (1896).

Common at Langkawi and Terutau in November 1907 and March 1909.

This large Tern is distinctly a deep-water species, and is, in the main, found off rocky islets or in the middle of the Straits of Malacca, and not inshore on the mud-flats as are the smaller species of *Sternula*.

CHARADRIIDÆ.

15. SARCOGRAMMUS ATRINUCHALIS.

*Sarcogrammus atrinuchalis* Jerdon; Sharpe, Cat. Birds Brit. Mus. xxiv. p. 152 (1896).

Exceedingly common on the Langkawi group and throughout Trang on the buffalo-lawns and rice-fields, but rather rarer down south, except on the Pahang River, where the bird nests on the broad sand-banks that border the river in certain parts of its course.

In the south the bird is known to the Malays as the *burong duit duit* or *burong mint a duit*, the "ask a penny bird," from its cry.

HOPLOPTERUS VENTRALIS.

*Hoplopterus ventralis* Sharpe, tom. cit. p. 159.

On the road between Tap-tien and Chong, after heavy rain

at the end of December, while in a gharry, we caught a glimpse of a large Plover running on the road, that may possibly have been this species, which was found in the district by Dr. Abbott. We did not obtain a front view, so that definite identification was not possible.

## 16. OCHTHODROMUS GEOFFROYI.

*Ochthodromus geoffroyi* (Wagl.); Sharpe, tom. cit. p. 217.  
Common at Kuala Kedah and at Langkawi in November and December 1907.

## 17. OCHTHODROMUS PYRRHOTHORAX.

*Ochthodromus pyrrhorthorax* (Gould); Sharpe, tom. cit. p. 226.

Pulau Terutau, December 1907.

Common on sandy shores throughout the Peninsula during the winter months. The presence of the allied form *O. mongolus* is open to doubt, but it may possibly occur. In winter plumage, however, the two species, or rather forms, are almost indistinguishable.

## 18. NUMENIUS ARQUATA.

*Numenius arquatus* Linn.; Sharpe, tom. cit. p. 341.

## 19. NUMENIUS PHÆOPUS.

*Numenius phæopus* Linn.; Sharpe, tom. cit. p. 355.

Both the Curlew and the Whimbrel are numerous along the coasts of the Peninsula throughout the winter months, but the latter is by far the commoner of the two, and on more than one occasion I have seen it in flocks that must have numbered several hundred individuals. The Malay name for both species is *burong pisau raut*, from a fancied resemblance of the bill to an implement used for splitting rattans.

## 20. TOTANUS CALIDRIS.

*Totanus calidris* Sharpe, tom. cit. p. 414.

The Redshank is common everywhere along the coasts during the winter months, keeping to the mud-flats and creeks among the mangroves, where it is met with in flocks, sometimes numbering over a hundred individuals.

## 21. TRINGOIDES HYPOLEUCUS.

*Tringoides hypoleucus* (Linn.); Sharpe, tom. cit. p. 456.

The Common Sandpiper is found throughout the Peninsula in every month of the year, though, of course, more sparingly from April to August.

## 22. TOTANUS STAGNATILIS.

*Totanus stagnatilis* Bechst.; Sharpe, tom. cit. p. 422.

A male was shot on Langkawi in February 1909.

## 23. TEREKIA CINEREA.

*Terekia cinerea* (Güldenst.); Sharpe, tom. cit. p. 474.

Very common along the coast in the winter months.

## 24. PSEUDOGLOTTIS GUTTIFER.

*Pseudoglottis guttifer* (Nordm.); Sharpe, tom. cit. p. 479.

This rare Limicoline bird is probably a great deal commoner, at any rate in its winter-quarters, than would appear at first sight from the number of skins in collections. It is likely to escape notice owing to its very close superficial resemblance to the Common Greenshank, along with which it occurs. We have obtained five specimens, two from Kuala Kedah in November 1907, and three from Kuala Kurau on the Perak coast, about thirty miles to the south of Penang, in February 1908.

## 25. GLOTTIS NEBULARIUS.

*Glottis nebularius* (Gunner); Sharpe, tom. cit. p. 481.

The Greenshank was common at Kuala Kedah and on Pulau Terutau in November and December 1907.

## 26. RHYACOPHILUS GLAREOLA.

*Rhyacophilus glareola* (Gmel.); Sharpe, tom. cit. p. 491.

The Wood-Sandpiper is not a common bird in the Peninsula, and seems to be met with only in the more inland districts. Two or three were obtained on the lake at Lay Song Hong in the interior of Trang at the end of January 1910.

27. LIMONITES RUFICOLLIS.

*Limonites ruficollis* (Pall.) ; Sharpe, tom. cit. p. 545.

A female in winter plumage obtained at Kuala Kedah in November 1907 appears to belong to this species, which occurs in numbers along the Peninsula coast during the winter, though some individuals may prove to be referable to *L. minuta*.

28. ANCYLOCHILUS SUBARQUATA.

*Ancylochilus subarquatus* (Güldenst.) ; Sharpe, tom. cit. p. 586.

The Curlew-Sandpiper is widely, though somewhat sparingly, distributed throughout the Peninsula, but individuals appear to arrive early and remain late, and specimens in almost complete breeding-plumage are not infrequently met with.

Our collection contains a male from Kuala Kedah, shot in November 1907.

29. GALLINAGO STENURA.

*Gallinago stenura* (Kuhl) ; Sharpe, tom. cit. p. 619.

The Pintail Snipe was exceptionally abundant in the rice-fields both in Langkawi and in Trang ; in the latter locality *Gallinago megala*, which has recently been obtained in Selangor, probably occurs also, though we did not obtain specimens.

ARDEIDÆ.

30. ARDEA SUMATRANA.

*Ardea sumatrana* Raffles ; Sharpe, Cat. Birds Brit. Mus. xxvi. p. 68 (1898).

Common along the coasts, both among the mangroves and on the shores of rocky islands. We found it very abundant in the Rhio Archipelago, and discovered that the breast, well hung and well rubbed with pepper and salt, was by no means a bad substitute for beef-steak.

A fine male, now mounted in the Selangor Museum, was secured on Terutau in November 1907.

## 30. DEMIEGRETTA SACRA.

*Demiegretta sacra* (Gmel.); Sharpe, tom. cit. p. 137.

The Reef-Heron is common throughout the coasts of the Malay Peninsula where the shore is of rock or sand, but appears to avoid the mangroves and mud-flats. All the specimens that we have secured are in the grey phase of plumage.

## 32. GORSACHIUS MELANOLOPHUS.

*Gorsachius melanolophus* (Raffles); Sharpe, tom. cit. p. 166.

This Bittern is very sparingly distributed throughout the Peninsula, though its comparative rarity in collections therefrom is probably due to its nocturnal habits. We are inclined to think that the species is at least partially migratory, and the majority of the few specimens that have passed through our hands were obtained in the winter months. Most of our material was secured actually on the coast or on small islands in the Straits of Malacca, but the Trang collection contains an immature female from Ko Khau, at some considerable distance inland.

## 33. BUTORIDES JAVANICA.

*Butorides javanica* (Horsf.); Sharpe, tom. cit. p. 177.

Abundant everywhere on the coast and on the tidal estuaries, wherever there are mangroves.

## 34. ARDEOLA BACCHUS.

*Ardeola bacchus* (Bp.); Sharpe, tom. cit. p. 211.

A male Pond-Heron, indubitably of this species, was obtained on Pulau Langkawi in March 1909, and Pond-Herons were also abundant in Trang on the flooded rice-fields in December and January. All the specimens obtained were, however, in winter plumage, in which stage it is almost impossible to separate the two species *A. grayi* and *A. bacchus*, whose ranges overlap in the northern Malay Peninsula. The genus is extremely rare in the south, though a specimen of *A. grayi* is in the British Museum

from "Malacca," while the Selangor Museum possesses a specimen from Klang that we regard as belonging to the same species, which has also been recorded by Grant from Patani. In Trang this bird kept in large flocks, and, unlike *Bubulcus coromandus*, was so shy as to be almost unapproachable.

35. *BUBULCUS COROMANDUS*.

*Bubulcus coromandus* (Bodd.); Sharpe, tom. cit. p. 217.

The Cattle-Egret is a bird of very uncertain distribution in the Peninsula, though in some districts, usually near the coast, it is very abundant. It is, as its trivial name implies, almost invariably associated with cattle, in the case of the Malay Peninsula with the water-buffalo, which it attends so closely that it is often difficult to obtain specimens without injuring or stampeding the beasts. It was very numerous and tame in Trang in December and in Langkawi in November. In the south of the Peninsula the buff breeding-plumes are assumed about April.

CICONIIDÆ.

36. *DISSURA EPISCOPUS*.

*Dissura episcopus* (Bodd.); Sharpe, tom. cit. p. 294.

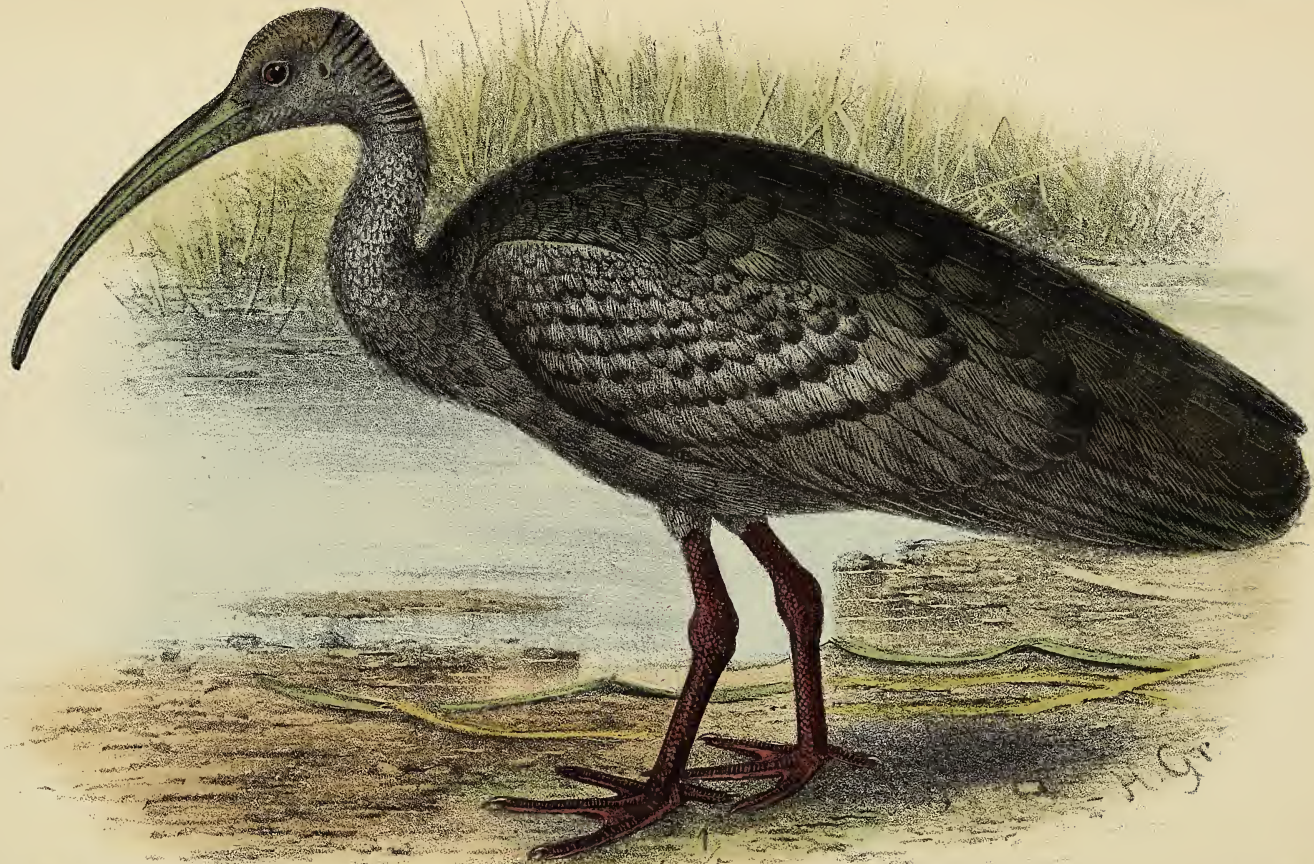
This Stork is common on the rice-fields and open plains of Trang and also in Langkawi. Dr. Annandale and I found it abundant in the interior of the Patani States on the east coast of the Peninsula, but it has not, as yet, been recorded from south of the latitude of Penang.

37. *LEPTOPTILUS DUBIUS*.

*Leptoptilus dubius* Sharpe, tom. cit. p. 315.

A specimen of this large Adjutant was obtained on the Lay Song Hong, a shallow lake or rather lagoon in the interior of Trang, in January 1910.

Most of the records for this species from the Malay Peninsula should probably be referred to the smaller species *L. javanicus* Horsf., which is very common along the coast, though hard to procure in most places owing to its shyness and the depth of the mud, which is infested with crocodiles.



H. Grönvold del. et lith.

5.  
THAUMATIBIS GIGANTEA.

West. Newman imp.



## IBIDIDÆ.

## 38. GRAPTOCEPHALUS DAVISONI.

*Graptocephalus davisoni* (Hume), Sharpe, Cat. Birds Brit. Mus. xxvi. p. 14 (1898).

*Pseudibis papillosa* (nec Temm.), Müll. Journ. für Orn. 1882, p. 437 (Salanga).

This species is evidently common in Trang, and we have received several specimens from the Lay Song Hong, a large lake or swamp in the interior of the State. Our specimens agree exactly with the types of the species from the Pakchan estuary in the extreme south of Tenasserim, while a skin collected by Lt.-Colonel Wingate in S.W. Yunnan differs in having had the base of the neck on the bare parts deep red instead of livid yellowish-white. Elliot (P. Z. S. 1877, p. 490) has already noticed this difference in certain Siamese birds, but it is improbable that the two forms are specifically distinct, the colours of the bare parts, as in other Ibises, varying greatly with age, sex, and season.

## 39. THAUMATIBIS GIGANTEA. (Plate I.)

*Ibis gigantea* Oust. Bull. Soc. Philom. (7) i. p. 25 (1877).

*Thaumatibis gigantea* Elliot, P. Z. S. 1877, p. 489; Sharpe, tom. cit. p. 14, note.

♂. Krongmon, Interior of Trang, 19th February, 1910.

This is the third known specimen of an exceedingly rare Ibis. Oustalet's type came from Cochin China, and Dr. Abbott obtained a second specimen in the interior of Trang, where he states that it was not uncommon in the dry season. We did not ourselves come across the species, and it was only with great difficulty that our collectors succeeded in obtaining a single individual. Our specimen (Pl. I.), which, judging from the bill and feet, is an adult bird, agrees precisely with the type as described by Dr. Elliot.

The dimensions are:—

Wing 21·5 ; tail 10·5 ; bill along culmen 9·3 ; tarsus 4·4 inches.

The colours of the soft-parts are not noted by the collector, but appear to have been :—

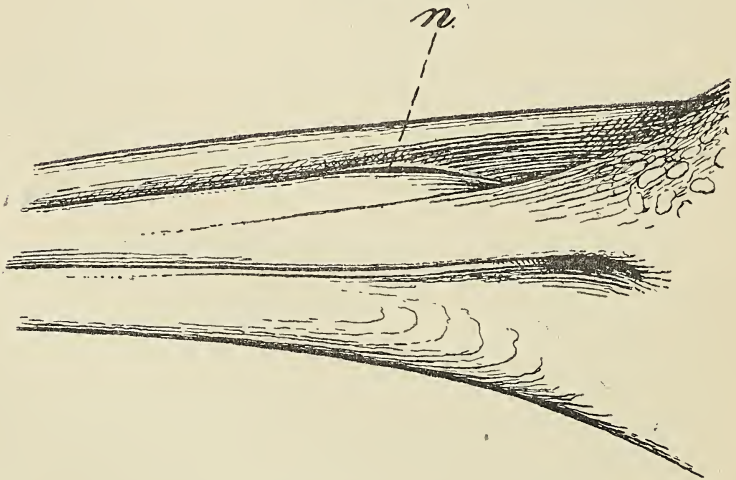
Bare parts of head and neck bluish-black, with black

Text-fig. 5.



Front aspect of right tarsus of *Thaumatibis gigantea*, showing hexagonal and slightly irregular scaling.

Text-fig. 7.



Base of bill of *T. gigantea*, showing slit-like nostril.

transverse bars on the back of the head and neck ; bill dull lake ; feet and legs bright crimson-lake, claws horny.

## SULIDÆ.

## 40. SULA SULA.

*Sula sula* (Linn.); Ogilvie-Grant, Cat. Birds Brit. Mus. xxvi. p. 436 (1898).

Numerous off Langkawi in November 1907.

The Booby is found in large numbers throughout the Straits of Malacca south to Singapore, but, at any rate on the western side, is seldom seen near land. It breeds on a small rocky island, one of the Aroa group, in mid-channel between the coast of Selangor and Sumatra. Near Pulau Jarak, in December 1904, one actually flew under the thwarts of our boat in the early morning and being a fine adult specimen was duly enshrined in the Selangor Museum.

## PHALACROCORACIDÆ.

## [PLOTUS MELANOGASTER.

*Plotus melanogaster* (Gm.); Ogilvie-Grant, Cat. Birds Brit. Mus. xxvi. p. 414 (1898).

We saw a Darter on the freshwater lake in the Langkawis (alluded to, 'Ibis' 1910, p. 664), but it kept to the middle of the lake, and having no boat we were unable to secure it. We are quite at a loss to know where the specimens in the British Museum from "Penang," "Province Wellesley," "Malacca," and "Johor" really came from, as it is highly improbable that they were derived from the localities ascribed to them. The Hume collectors do not appear to have come across the species, nor have we met with it ourselves in over seven years, and there are no local specimens in any of the Malayan Museums. It has been uncertainly recorded from the headwaters of the Perak and Pahang Rivers by Annandale and Hubback (*in litt.*), but the observers were not ornithologists and may possibly have confused it with the Finfoot (*Heliopais personata*) met with in these localities.]

## ANATIDÆ.

## 41. ASARCORNIS LEUCOPTERA.

*Asarcornis scutulata* (part.) Salvad. Cat. Birds Brit. Mus. xxvii. p. 60 (1895).

*Asarcornis leucoptera* (Blyth); Oates, Man. Game Birds Ind. pt. ii. p. 136 et seqq. (1899); Robinson, Journ. Fed. Malay States, iv. p. 132 (1910).

This Duck was very abundant in Trang, from various districts in which State we have obtained over a dozen specimens.

At Chong near the foot of the main dividing-range, which was the only locality in which we personally met with the species, it was fairly numerous and used to come down to the partially flooded rice-fields to feed in the early morning and late afternoon. For so heavy and solid a bird it was a very powerful flier and capable of carrying off a large dose of lead. In the evening, after feeding, it went off to roost in the patches of jungle growing on small and steep hills rising from the general level of the rice-fields. The specimens that we ourselves examined had been feeding on very large snails, apparently a species of *Ampullaria*, with which their crops were crammed.

The changes of plumage are very puzzling in this species, and we are rather doubtful whether the sexes really differ in any material particular, save the slightly larger size of the male.

Of the eight specimens now before us, four are almost uniform glossy black below and have the mantle and back also black, the former glossed with metallic green. The black wing-speculum beneath the white shoulder is broad and clearly defined, and the bills are bright yellow blotched with fuscous.

Three of these specimens are sexed male and are undoubtedly adult. They have the bony knobs at the angle of the wing well developed. A fourth is sexed female by the collector, but cannot be in any way distinguished from the other three specimens.

A fifth bird has the under surface brown, a black collar round the fore-neck, and the upper surface dull oily brown, some glossy green feathers are, however, appearing. The speculum on the wing is ill-defined and the "knuckle-dusters" not very pronounced; bill paler than in the others and more heavily blotched. Wing 14.2 inches.

This bird is marked male and is probably an immature bird of that sex.

The sixth, sexed male, is similar in every way to the preceding, except that the black collar is less in evidence; the "knuckle-dusters" are well marked. Wing 13·2 inches.

The seventh and eighth birds are sexed female. Wing 13·2 and 12·2 inches, wing-speculum well defined. In one specimen the black collar is not very clear, but in the other it is broad and extends well on to the breast. Back of the neck in both specimens glossy greenish black.

The evidence therefore tends to shew that the adult males are entirely black beneath and that the immature males are brown beneath with a black collar, but whether the fully adult females ever become quite black beneath or remain like the immature males is still uncertain.

#### 42. DENDROCYCNA JAVANICA.

*Dendrocygna javanica* (Horsf.); Salvad. tom. cit. p. 156.

The Whistling Teal is common in Trang and on the Langkawis, and indeed in the north of the Peninsula generally, in swamps and rice-fields and on the larger rivers.

Further south it is very much less common and is rarely met with in the Federated Malay States, except on the Perak and Pahang Rivers, where it is sometimes exceedingly numerous. In Patani it was said to be a migratory bird, as is probably true of *Asarcornis leucoptera*, arriving with the breaking of the N.E. Monsoon in October and November; but its movements are probably only of a local character, depending rather on the relative suitability of the feeding-grounds in one district or another than on a true season migration.

#### FALCONIDÆ.

#### 43. CIRCUS ÆRUGINOSUS.

*Circus æruginosus* (Linn.); Sharpe, Cat. Birds Brit. Mus. i. p. 69 (1874).

Langkawi, November and February.

The Marsh-Harrier is fairly numerous in the winter

months, wherever there are suitable open spaces. It is particularly abundant in a big marsh near Kuala Lumpur, whence Seimund has secured numerous specimens together with examples of *C. spilonotus* and *C. melanoleucus*.

44. *ASTUR POLIOPSIS*.

*Astur poliopsis* (Hume); Sharpe, tom. cit. p. 110.

Two adult females and an immature bird from the interior of Trang agree well with this race and differ from the typical *A. badius* of the Indian Peninsula in their smaller size and in the absence of the rufous nuchal collar. In the Singapore Museum there are specimens of this species from "Singapore," but their provenance is somewhat doubtful.

45. *ASTUR SOLOENSIS*.

*Astur soloensis* (Lath.); Sharpe, tom. cit. p. 114.

Very rare in the Malay Peninsula, whence we have only one specimen from Langkawi, shot at the beginning of December 1907.

46. *ICTINAËTUS MALAYENSIS*.

*Ictinaëtus (Neopus) malayensis* (Rheinw.); Sharpe, tom. cit. p. 257; Robinson, p. 171.

The Black Eagle is rare in the plains, though often seen in the mountains of the Malay Peninsula. A fine adult female was obtained near Chong, in Trang, on December 17th, 1909.

47. *SPIZAËTUS NIPALENSIS*.

*Spizaëtus nipalensis* (Hodgs.); Sharpe, tom. cit. p. 267; Robinson, Journ. Fed. Malay States Mus. iv. p. 132 (1909).

An immature male, exactly agreeing with others from the Himalayas, was obtained by one of our Dyaks in the hills of Pulau Terutau in March 1909. The species has been procured in Southern China by Styan, but has not apparently been recorded from Burma and Tenasserim (Blanford, Faun. Brit. Ind., Birds, iii. p. 333, 1895). The present locality shews therefore a very considerable extension of range.

## 48. SPIZAËTUS LIMNAËTUS.

*Spizaëtus limnaëtus* (Horsf.); Sharpe, tom. cit. p. 272.

An adult male in the melanotic phase, exactly agreeing with Horsfield's type of the species from Java, was collected on January 12th, 1910, at Lam-ra.

The species is fairly common throughout the Peninsula, keeping to low country and to the lower ground, while the smaller and handsomer *S. alboniger* is found on the hills and in deep jungle.

## 49. SPILORNIS PALLIDUS.

*Spilornis pallidus* (Walden); Sharpe, tom. cit. p. 290, pl. ix.

After examination of a large series of specimens from the whole Malay Peninsula, we are forced to the conclusion that only one form is represented, and that, although it does not precisely agree with any definite species, it comes nearest to *S. pallidus* of Walden from Borneo. That, however, was described on the strength of an extremely young specimen which does not shew the real characters of the species.

The series before us varies greatly both in general intensity of coloration and in the nature and intensity of the spots on the lower surface, which in the majority of the specimens are numerous and somewhat ill-defined at the edges, in this respect approaching *S. rutherfordi*, originally described from Hainan, but apparently spread all over Indo-China. Some specimens, however, notably one from the Larut Hills, Perak, are very much darker, almost approaching Javan birds (*S. bido* Horsf.). The whole genus stands greatly in need of revision.

## 50. BUTASTUR INDICUS.

*Butastur indicus* (Gm.); Sharpe, tom. cit. p. 297.

We have obtained this species twice from Langkawi, in November 1907 and February 1909.

## 51. HALIAËTUS LEUCOGASTER.

*Haliaëtus leucogaster* (Gm.); Sharpe, tom. cit. p. 307.

The White-bellied Sea-Eagle is found throughout the

coasts of the Malay Peninsula and extends for some distance inland wherever there is much rice-cultivation. Nearly every small island has a breeding pair of these birds, the nest being an enormous mass of sticks, placed in some lofty tree and added to from year to year. Some of these nests are known to have endured for at least thirty or forty years, and have become conspicuous land-marks on the coast.

52. HALIAËTUS LEUCORYPHUS.

*Haliaëtus leucoryphus* (Pall.) ; Sharpe, tom. cit. p. 308.

We obtained two immature specimens on Pulau Langkawi which are probably referable to this species and not to *H. leucogaster*. The locality shews a considerable extension in range, *H. leucoryphus* not having been hitherto recorded from any part of the Malay Peninsula. One of the specimens was the cause of a rather amusing incident. It was flying at a very considerable height and I had challenged Seimund to bring it down with a shot from his choke barrel. He succeeded, with the result, however, that it fell from the height of about sixty yards through the roof of a Chinaman's house and through his mosquito net into his bed, where he was having a peaceful nap after a pipe or so of opium. He bounced out in a great state of alarm and indignation, and it took some time to quiet him down and explain that the end of the world had not arrived. The momentum of a fifteen pound bird falling from a height of sixty yards is by no means inconsiderable.

53. HALIASTUR INTERMEDIUS.

*Haliastur intermedius* Gurney ; Sharpe, tom. cit. p. 314.

The range in the Peninsula, distribution, and habits are precisely as in *Haliaëtus leucogaster*, except that whereas that species is rarely seen except in pairs, this bird is often met with in numbers, especially on or near the fishing-stages when the catch is landed.

54. MICROHIERAX FRINGILLARIUS.

*Microhierax fringillarius* (Drap.) ; Sharpe, tom. cit. p. 367.

The Pygmy Falconet is fairly numerous throughout the



Malay Peninsula in open country, especially in the vicinity of large grass plains and on the banks of the rivers. It is known to Malays as the *Lang belalang*, or grasshopper-hawk, a large proportion of its food consisting of big Acridiidae, though it not unfrequently attacks and kills birds weighing a great deal more than itself.

55. BAZA LOPHOTES.

*Baza lophotes* (Temm.); Sharpe, tom. cit. p. 352.

Our men secured two examples of this rare and beautiful species in Trang. In the Peninsula generally it is decidedly a scarce bird, and the Selangor Museum possesses only two other specimens—one from Singapore collected many years ago, and another recently procured by Mr. Seimund in the vicinity of Kuala Lumpur. This was shot in the evening at the edge of the jungle perched on a lofty tree. Mr. Seimund particularly noted that its crest was held vertically upward.

In Singapore Mr. Ridley states that this species is a migratory bird and that he has observed considerable flocks crossing the Botanic Gardens of that city. Mr. Ridley is well acquainted with the local birds and unless he is mistaken in his identification the observation is distinctly interesting.

56. BAZA JERDONI.

*Baza jerdoni* (Blyth); Sharpe, Ibis, 1893, p. 557; Robinson, Journ. Fed. Malay States Mus. iv. p. 132 (1909); Hartert, Nov. Zool. xvii. p. 214 (1910) (Hainan).

*Baza sumatrensis* (Lafr.); Sharpe, Cat. Birds Brit. Mus. i. p. 357, pl. xi. fig. 1 (1874) (immature).

*Baza incognita* Hume, Stray Feathers, iii. p. 314 (1875); id. op. cit. viii. p. 45 (1879).

Four specimens of this exceedingly rare Cuckoo-Falcon were secured in Trang and two in Langkawi. We have in addition examined one from the "East Indies," in the Liverpool Museum, four in the British Museum, including that collected by Wallace in Sumatra ('Ibis,' 1868, p. 18), the type of *Baza incognita* from Central Tenasserim (Hume

Coll.), a skin from Native Sikkim (Mandelli Coll.), and one from Malacca registered as spm. *b* of *Baza magnirostris*, regarding which there was originally some confusion, cleared up by Dr. Sharpe ('Ibis,' 1893, p. 555). There is also an adult stuffed specimen, from Larut, Perak, in the Selangor Museum. It is obvious that these eleven specimens all belong to one species, though, as is almost invariably the case, the Sikkim bird is somewhat larger than those from the Malay Peninsula and from Sumatra.

Of the nine skins now before us, five are sexed as male by the collectors, of which one is evidently immature, while four are marked female, of which one may be considered as a young bird.

It may be of interest to describe the plumages of these nine birds in some detail, the present series being larger than any hitherto got together.

*a.* Fully adult male. Sungei Kilim, Pulau Langkawi, March 22nd, 1909.

Crown and crest uniform black-grey on the lores, the crest slightly tipped with white; sides of the face grey, the feathers with narrow rufous edges; sides of the throat, feathers above the eye, and a nuchal collar rufous buff, the latter with broad black centres to the feathers; a median gular stripe black, extreme point of the chin grey; upper breast dull brown, many of the feathers with darker bases and shaft-stripes. Remainder of the under surface, including the under tail-coverts, under wing-coverts, and axillaries, evenly barred with white and liver-brown, the latter shading into blackish on the flanks. Mantle and shoulders blackish brown, glossed with purplish, rest of the wing-coverts paler brown; flight-feathers regularly barred with black and brown on their external, with black and white on their internal aspect. Tail with four dark and four light bars and a narrow pale terminal tip.

Wing 12·8; tail 9·1; tarsus 1·65; bill from gape 1·3; crest 2·3 inches.

*b, c.* Somewhat less adult males than "*a.*"

Chong, Interior of Trang, North Malay Peninsula, 17th and 19th December, 1909.

These specimens closely resemble "a," but differ in the following points:—The dark bars on the undersurface are more rufous, the rufous nuchal collar is more pronounced, the gular streak is thicker, and most of the feathers of the crown have paler edges, either buff or grey, giving a streaked appearance to these parts.

Measurements:—

*b.* Wing 12·7 ; tail 8·8 ; tarsus 1·6 ; bill from gape 1·3 ; crest 2·3 inches.

*c.* Wing 12·3 ; tail 8·7 ; tarsus 1·65 ; bill from gape 1·25 ; crest 2·3 inches.

*d.* A still younger male.

Chong, Interior of Trang, North Malay Peninsula, 18th December, 1909.

In this specimen, which is somewhat in moult, the upper surface is much paler, especially the shoulders, the feathers of which have pale margins, the throat and chest are heavily streaked longitudinally with black, and the cross-barring has a very irregular appearance, large guttate spots being present in the centre of the abdomen; sides of the head heavily streaked with black.

Wing 12·2 ; tail 8·5 ; tarsus 1·6 ; bill from gape 1·25 inches ; crest (in moult).

*e.* Between Hankachin and Bahonee, Tenasserim, February 6th, 1875 (*A. L. Hough*).

Somewhat older than "d," judging from the evenness of the under-surface barring and the black shoulder, but having the head pale, the shafts of the feathers only black ; breast very pale, sides of the head grey ; crest long.

Wing 12·9 ; tail 9·1 ; tarsus 1·6 ; bill from gape 1·3 ; crest 2·6 inches.

Type of *B. incognita*, Hume.

*f.* Adult female. Native Sikkim, March 1878.

Head pale rufous-buff with dark shaft-stripes to the feathers ; a faint black gular stripe and the under surface rufous buff and white, the bars clearly defined ; median wing-coverts buff tipped with white.

Wing 13·4; tail 9·5; tarsus 1·65; bill from gape 1·3; crest 2·95 inches.

*g.* A somewhat older female than "*f.*"

Sungei Kilim, Langkawi, 23rd February, 1909.

Very similar to "*f.*" but with the shoulders darker and without the pronounced white margins to the median wing-coverts, though this may be due to the age of the feathers; sides of the head somewhat richer buff.

Wing 12·7; tail 9·2; tarsus 1·6; bill from gape 1·25; crest 1·9 inches.

*h.* A female exactly resembling "*g.*"

Chong, Trang, North Malay Peninsula, 19th December, 1909.

Wing 12·9; tail 9·6; tarsus 1·65; bill from gape 1·3; crest 2·0 inches.

*i.* A female, probably immature.

Interior of Sumatra (*Wallace Coll.*).

Like the other females, except that the cross-bars on the belly are less clearly defined, while the gular stripe is entirely lacking.

Wing 12·4; tail 9·0; tarsus 1·6; bill from gape 1·3; crest 2·3 inches.

It may therefore be fairly concluded that the females in this species differ from the males in the pale head with buff, and not grey sides, and in the more rusty, less brown bars on the under surface. There is a slight difference in size in favour of the female, but this is by no means marked, and in the small series before us may be due to the influence of locality and individual variation.

The specimen of *Baza ceylonensis* Legge, from near Kandy, in the British Museum can be exactly matched except in size by two of the above-described series of females, and there is but little doubt that the form is at best merely a poor subspecies of *B. jerdoni*. The dimensions of this specimen, which is a female, are:—Wing 12·0; tail 8·5; bill from gape 1·25; crest 2·4 inches.

The Bornean bird, *B. borneensis* Bruggem. (Sharpe, 'Ibis,' 1893, p. 557), is quite a good species, distinguished by its

still smaller size, wing about 11·5, tail about 7·8 inches, and by having the sides of the head not grey but rich rufous and the under surface also more chestnut. There is an adult male and two somewhat younger males from N.E. Borneo (*Colls. Hose and Everett*) in the British Museum.

57. CERCHNEIS TINNUNCULUS.

*Cerchneis tinnunculus* (Linn.); Sharpe, tom. cit. p. 425.

*Tinnunculus saturatus* Blyth, Journ. Asiat. Soc. Bengal, xxviii. p. 277 (1859).

We obtained a single immature female of the Kestrel at Langkawi in November 1907, and Dr. Abbott (*vide Richmond, in litt.*) procured an adult female in Trang on January 17th, 1897. Our own specimen is in extremely worn plumage and somewhat bleached, and it is therefore difficult to say whether it is merely a migrant from more northern localities or a specimen of the resident tropical race described by Blyth as above. The former appears to us to be the more probable supposition.

58. PERNIS TWEEDDALII.

*Pernis tweeddalei* Hume, Stray Feathers, ix. pp. 446-8 (1881); id. op. cit. x. p. 513 (1887); Robinson, p. 171.

59. PERNIS CRISTATUS.

*Pernis cristatus* Cuv. Règne Anim. i. p. 335 (1829).

*Pernis ptilonorhynchus* (Temm.); Sharpe, tom. cit. p. 347.

Both these species, if they are distinct, occur throughout the Peninsula, but specimens in the plumage figured by Hume as *P. tweeddalii* are very rare and we have only come across two or three of them. Immature birds without crests are fairly common in the winter months.

PANDIONIDÆ.

60. PANDION HALIAËTUS.

*Pandion haliaëtus* (Linn.); Sharpe, tom. cit. p. 449.

On the coast and in suitable localities as far as thirty miles inland the Osprey is fairly common throughout the Peninsula.

One was shot at Kuala Kedah in November 1907. The Malay name for the bird is *Lang siput*, or Oyster-Hawk derived from the idea that at the turn of the tide it flies up river uttering its call to warn the shellfish of the return of the water.

61. *POLIOAËTUS ICHTHYAËTUS*.

*Polioaëtus ichthyaëtus* (Horsf.) ; Sharpe, tom. cit. p. 452.

Not rare in the northern portion of the Peninsula on the coast and inland wherever there are rice-fields, but not so numerous further south.

In the interior on the rivers flowing through dense jungle its place is taken by the smaller species *P. humilis*. On some rivers, notably the higher reaches of the Tembeling and its tributary the Tahan, in Pahang, almost every reach is inhabited by a pair of these birds, which lumber along in front of the canoe as the traveller advances up stream.

STRIGIDÆ.

62. *KETUPA CEYLONENSIS*.

*Ketupa ceylonensis* (Gm.) ; Sharpe, Cat. Birds Brit. Mus. ii. p. 4 (1875).

We collected three specimens of the large Fishing-Owl on the edges of the rice-fields at Chong in the interior of Trang.

It does not appear to have been recorded from further south than Central Tenasserim, so that the present locality shews a considerable extension in range for the species.

63. *KETUPA JAVANENSIS*.

*Ketupa javanensis* Less. ; Sharpe, tom. cit. p. 8.

Very common everywhere in suitable localities throughout the Peninsula.

64. *SYRNIUM SELOPUTO*.

*Syrnium sinense* (Lath.) ; Sharpe, tom. cit. p. 261.

This Wool-Owl is generally found in orchards and villages roosting in the large fruit-trees and quartering the rice-

fields at night for rats, &c.; it is very common in Patani, but appears to be a decidedly rare bird in the Straits Settlements and in the Federated Malay States, where we have met with very few specimens.

One was collected at Chong in December.

65. SYRNIUM MAINGAYI.

*Syrnium maingayi* Hume, Stray Feathers, vi. p. 27 (1878); Robinson, p. 172.

Chong, Trang, 10th December, 1909.

Agreeing well with specimens from the more southerly portions of the Peninsula.

66. HUHUA ORIENTALIS.

*Bubo orientalis* (Horsf.); Sharpe, tom. cit. p. 39.

♀. Lamra, Trang, 21st February, 1910.

Widely distributed throughout the country, but everywhere rare and rather difficult to obtain.

67. NINOX SCUTULATA.

*Ninox scutulata* Raffles; Sharpe, tom. cit. p. 156.

Fairly common everywhere, especially in winter, when its numbers appear to be added to by migrants from the north, and it is often found at that season on extremely small islands.

68. SCOPS MALAYANA.

*Scops malayanus* Hay; Sharpe, tom. cit. p. 58.

We have a pair of this species from Trang and a few others from various parts of the Malay Peninsula, including the Langkawis; but the bird is everywhere rare.

The male of the Trang pair is in a foxy-red phase of plumage, while the female is grey.

69. SCOPS LEMPIJI.

*Scops lempiji* (Horsf.); Sharpe, tom. cit. p. 91.

The commonest of the Scops Owls, which are all very nocturnal and difficult to get, though their melancholy hoots are much heard, especially on moonlight nights. We have

this species from Langkawi, where a female was obtained in March 1909.

PSITTACIDÆ.

70. LORICULUS VERNALIS.

*Loriculus vernalis* (Sparrm.) ; Salvad. Cat. Birds Brit. Mus. xx. p. 517 (1891).

Two females only, from Lamra in the interior of Trang.

The species has occurred as far south as Klang in Selangor, but it is extremely rare south of Taiping in Perak, *L. galgulus* (Linn.) being the common species in the south of the Peninsula.

CORACIIDÆ.

71. EURYSTOMUS ORIENTALIS.

*Eurystomus orientalis* (Linn.) ; Sharpe, Cat. Birds Brit. Mus. xvii. p. 33, pl. ii. fig. 1 (1892).

72. EURYSTOMUS CALONYX.

*Eurystomus calonyx* Sharpe, tom. cit. p. 38, pl. ii. fig. 2.

Both these forms occur together throughout the Peninsula and are represented in the Trang collection.

Both species are commoner during the winter months and are certainly migratory, having been met with on the small islands in the middle of the Straits of Malacca.

Considerable variation is met with in the amount of blue on the tail-feathers and on the outer webs of the secondaries, which are the characters used to differentiate the two forms, though *E. calonyx* is also slightly smaller.

Series of both are in the Selangor Museum for every month from October to March.

ALCEDINIDÆ.

73. ALCEO BENGALENSIS.

*Alcedo ispida* (part.) ; Sharpe, tom. cit. p. 141.  
Exceedingly abundant in suitable localities.

74. ALCEO MENINTING.

*Alcedo meninting* Horsf. ; Sharpe, tom. cit. p. 158.

This brilliant little Kingfisher is everywhere rather rare,



though well distributed throughout the whole length of the Peninsula. We obtained a male on Terutau in March 1909.

75. *ALCEDO EURYZONA.*

*Alcedo euryzona* Temm. ; Sharpe, tom. cit. p. 154 ; Robinson, p. 172.

Three specimens of this rare Kingfisher were shot at Chong and on the hills in the vicinity by one of our Dyaks.

Though nowhere common, the species owes its rarity in collections rather to its extreme wariness and shyness than to any actual scarcity. We have not hitherto secured specimens, but we have met with the species in several localities, viz., at the foot of Gunong Tahan, on the Semangko Pass\*, and in several places in North and Central Perak, always in deep jungle and near mountain streams. It flies with great rapidity and is very restless.

76. *CEYX TRIDACTYLA.*

*Ceyx tridactyla* (Pall.) ; Sharpe, tom. cit. p. 174 ; Robinson, p. 172.

77. *CEYX EUERYTHRA.*

*Ceyx euerythra* Sharpe, tom. cit. p. 179.

These little *Ceyces* are widely distributed throughout the Peninsula in heavy jungle, usually near water.

78. *PELARGOPSIS AMAUROPTERA.*

*Pelargopsis amauroptera* (Pears.) ; Sharpe, tom. cit. p. 97.

Three specimens of this handsome Stork-billed Kingfisher were obtained in the Langkawis in February and March 1909. It has been procured in the same group and also in Trang by Dr. Abbott, and his specimens are recorded by Oberholser in his review of the genus (Proc. U. S. Nat. Mus. xxxv. p. 676 (1909)).

I have, however, not followed this author in the substitution of *Rhamphalcyon* for such a universally used name as *Pelargopsis*.

\* One has been recently obtained at Bentong, on the Pahang side of the main range about 40 miles from Kuala Lumpur.

## 79. CARCINEUTES PULCHELLUS.

*Carcineutes pulchellus* (Horsf.) ; Sharpe, tom. cit. p. 198.  
Common in dry jungle.

## 80. HALCYON COROMANDUS.

*Halcyon coromandus* (Lath.) ; Sharpe, tom. cit. p. 217.

Always rather rare in the Peninsula, but commonest in the coastal districts. We have a male from Terutau dated February 1909.

## 81. HALCYON SMYRNENSIS.

*Halcyon smyrnensis* (Linn.) ; Sharpe, tom. cit. p. 222.

Madarász has founded a species, *Halcyon perpulchra*, on a single specimen of this species from Singapore (Ann. Mus. Hungar. ii. pp. 1, 2 (1904)).

## 82. HALCYON PILEATUS.

*Halcyon pileatus* (Bodd.) ; Sharpe, tom. cit. p. 229.

Both this and the last named are common rice-field birds throughout the Peninsula. *H. pileatus* is also found along the rivers even in their upper reaches in jungle country, which is never the case with *H. smyrnensis*.

## 83. HALCYON ARMSTRONGI.

*Halcyon armstrongi* Sharpe, tom. cit. p. 277, pl. vii. fig. 1.

*Halcyon humii* Sharpe, tom. cit. p. 281, pl. viii.

Throughout the Malay Peninsula on the coast and estuaries, but never found far from salt-water.

Very abundant on Pulau Langkawi and Pulau Terutau.

We do not think that the two forms from the Malay Peninsula recognised by Dr. Sharpe can be kept distinct, and it is, indeed, a question whether all the Indo-Malayan forms would not better be included under one name *Halcyon chloris* (Bodd.).

*Halcyon armstrongi* is a slightly duller green bird, while *H. humii* is possibly smaller and brighter blue. Both forms, however, have been obtained together in widely separated localities and in the same month ; and as this Kingfisher is a strictly sedentary bird, we cannot regard the differences, which in extreme cases are certainly well-marked, as due to anything but age, sex, and degree of wear in the plumage.

*Halcyon armstrongi* was the first name published and therefore the one that is applicable, though it was only regarded by Dr. Sharpe as a subspecies of *H. chloris*, while to *H. humii* he accorded full specific rank.

84. HALCYON CONCRETUS.

*Halcyon concretus* (Temm.); Sharpe, tom. cit. p. 285.

Generally distributed throughout the Peninsula, including Singapore, but confined to deep jungle, where it is frequently—and, indeed, generally—found far from water, like *Carcineutes pulchellus*.

UPUPIDÆ.

85. UPUPA INDICA.

*Upupa indica* Reichenb.; Salvin, Cat. Birds Brit. Mus. xvi. p. 10 (1892).

Very common indeed in the interior of Trang in open sandy plains, this locality being the southernmost limit of the species on the west coast of the Peninsula. On the east side it was met with by Robinson and Annandale as far south as Patani in similar situations.

BUCEROTIDÆ.

86. DICHOCEROS BICORNIS.

*Dichoceros bicornis* (Linn.); Grant, Cat. B. Brit. Mus. xvii. p. 355; Robinson, p. 172.

Fairly common on Pulau Terutau and also on the Dindings, islands off the estuary of the Perak River, but separated from the mainland by a very narrow channel.

This species invariably flies at a great height in flocks of seven or eight, and it is difficult to procure a specimen except with a rifle.

In the paper quoted above, Robinson (p. 216, Section B) erroneously records this species as confined to the mainland. It should, of course, be placed in section C, as it is apparently common in Sumatra.

87. ANTHRACOCEROS MALABARICUS.

*Anthracoceros malabaricus* (Gm.); Grant, tom. cit. p. 365.

Common in Trang, Langkawi, and Terutau, but not found

south of Kedah, beyond which State it is replaced by *A. convevus*.

These two species—the other member of the genus occurring in the Peninsula, *A. malayanus*, is more of a jungle-bird—are much more open-country birds than the other Malayan Hornbills. They fly in flocks of five or six individuals and are met with principally along the course of the larger rivers and on the borders of rice-fields, where these are fringed with orchards and villages. They are especially fond of the fruit of the banyan or *kayu ara*, a fig-tree which is very abundant in such situations. Their flight is distinctly laboured and not so sustained as that of the larger species, nor do they fly nearly so high. Their Malay name is *Burong klinking*, alluding to their call, or *Burong lilin*, or Wax-bird, which probably has reference to the colour of the bill.

The larger species of the family, in addition to certain special and local names, are called *Burong enggang* or *burong rakit*, the latter name meaning “raft-bird,” a term which has been applied in some parts of the Peninsula to the Rouge-et-noir Broadbill, *Cymborhynchus malaccensis*.

#### 88. RHYTIDOCEROS UNDULATUS.

*Rhytidoceros undulatus* (Shaw); Grant, tom. cit. p. 382; Robinson, p. 173.

Fairly common in Pulau Terutau and Pulau Langkawi, and also obtained on the mountains of Selangor at high elevations.

### MEROPIDÆ.

#### 89. MELITTOPHAGUS SWINHOII.

*Melittophagus swinhoii* (Hume); Sharpe, Cat. Birds Brit. Mus. xvii. p. 55 (1892).

This beautiful Bee-eater was exceedingly common in the open country of Trang, especially near the coast. To the south it becomes much rarer, and is almost unknown further down the Peninsula than Taiping. We found it very abundant on the island of Langkawi in December 1908, where, just

about sunset, countless thousands used to appear and roost on a lofty dead tree among the mangroves on the shore at Kuau.

Among many of the more primitive Malays this is a bird of ill-omen, being associated with the Spectral Huntsman and his Phantom Pack, who loom large in the local folk-lore.

90. *MEROPS SUMATRANUS*.

*Merops sumatranus* Raffles ; Sharpe, tom. cit. p. 61.

Common nearly all over the Peninsula. Met with in Langkawi in February 1909.

91. *MEROPS PHILIPPINUS*.

*Merops philippinus* Linn. ; Sharpe, tom. cit. p. 71.

Not so abundant as the preceding species, and common only in the winter months.

Specimens from Terutau obtained in February and March 1909 are in the Selangor Museum.

92. *NYCTIORNIS AMICTA*.

*Nyctiornis amicta* (Temm.) ; Sharpe, tom. cit. p. 90.

This large and handsome Bearded Bee-eater is fairly common in the upland forests throughout the Peninsula, and ascends the mountains to an altitude of over 4000 feet, though it is more common on the lower hills. It is absent from the coastal zone, nor is it met with on any of the outlying islands. In Trang it is probably commoner than the two or three specimens collected indicate, as our Dyaks hardly considered it worth powder and shot.

CAPRIMULGIDÆ.

93. *CAPRIMULGUS AMBIGUUS*.

*Caprimulgus macrurus* Horsf. (part.) ; Hartert, Cat. Birds Brit. Mus. xvi. p. 557 (1892).

*Caprimulgus ambiguus* Hartert, Ibis, 1896, p. 373.

94. *CAPRIMULGUS JOTAKA*.

*Caprimulgus jotaka* Temm. & Schleg. ; Hartert, tom. cit. p. 552 ; Robinson, p. 174.

Both these species were very abundant at Chong for two

or three days in December, hawking after termites, which were fighting at the time.

*Caprimulgus jotaka* is a migrant, and, except possibly at high elevations, only occurs on the Peninsula from October to March; but *C. ambiguus* is resident throughout the year, though much less abundant during these months.

The former species is very common on the islands in the Straits of Malacca, especially those of the Langkawi group.

95. LYNCORNIS CERVINICEPS.

*Lyncornis cerviniceps* Gould; Hartert, tom. cit. p. 604.

Four specimens were shot at Chong with the preceding.

With the exception of a specimen, now in the Selangor Museum labelled "Penang," without other particulars, this is the most southerly locality recorded for the species. This magnificent Goatsucker, one of the finest of the family, only appeared on three or four nights for a few minutes before and after sunset, when the air was full of termites. Its flight was somewhat slow and very direct, rendering it a very much easier bird to shoot than its congener *L. temmincki*, which is sometimes very rapid in flight. We did not hear it utter any note.

CYPSELIDÆ.

96. TACHORNIS INFUMATA.

*Tachornis infumata* (Sclat.); Hartert, tom. cit. p. 467; Robinson, p. 175.

We got a single specimen of this Palm-Swift in the gardens at Chong.

97. MACROPTERYX LONGIPENNIS.

*Macropteryx longipennis* (Rafin.); Hartert, tom. cit. p. 514; Robinson, p. 175.

98. MACROPTERYX COMATA.

*Macropteryx comata* Temm.; Hartert, tom. cit. p. 517; Robinson, p. 176.

Both these Tree-Swifts are fairly abundant in Trang and are well distributed throughout the Peninsula. They are

very fond of perching on the top branches of lofty dead trees on the edge of the jungle or on the banks of rivers, leaving their perches for a few moments to hawk after insects and always returning to the same place. They are specially attracted by termites, and large numbers of these species, as of other Swifts and Goatsuckers, appear when these insects are fighting, which is generally at dusk after heavy rain.

## TROGONIDÆ.

## 99. PYROTROGON ORESCIUS.

*Harpactes orescius* (Temm.) ; Grant, Cat. Birds Brit. Mus. xvii. p. 494 (1892).

*Pyrotrogon orescius* Robinson, p. 176.

Very numerous both in Trang and on the Langkawi Islands, and the only member of the family met with in either of these localities. In the central and southern portions of the Peninsula it is a very much rarer bird.

## CUCULIDÆ.

## 100. COCCYSTES COROMANDUS.

*Coccytes coromandus* (Linn.) ; Shelley, Cat. Birds Brit. Mus. xix. p. 214 (1891).

Very common in Trang in the open country, and also in the Langkawi group ; it was met with, together with several other migratory Cuckoos, on the Aroa Islands in the middle of the Straits of Malacca, in November and December 1906. In the south of the Peninsula, at any rate in the more inland districts, it is very much rarer.

We believe this to be largely a migratory species, occurring in numbers only in the winter months, though Davison obtained specimens in Malacca in July.

## 101. SURNICULUS LUGUBRIS.

*Surniculus lugubris* (Horsf.) ; Shelley, tom. cit. p. 176 ; Robinson, p. 176.

The Drongo-Cuckoo is very common throughout the Peninsula at all times of the year.

102. *HIEROCOCCYX SPARVERIOIDES.*

*Hierococcyx sparverioides* (Vig.); Shelley, tom. cit. p. 232.

The larger Hawk-Cuckoo was fairly numerous in Trang; to the south it is decidedly rarer, though occasionally met together with *H. nasicolor*.

103. *HIEROCOCCYX NISICOLOR.*

*Hierococcyx fugax* (Horsf.); Shelley, tom. cit. p. 236; Robinson, p. 177.

*Hierococcyx nasicolor* (Hodgs.); Blanford, Faun. Brit. India, Birds, iii. p. 214 (1895).

A single adult from Trang.

Rather commoner than the preceding species, especially in the central and southern portions of the Peninsula.

104. *CUCULUS MICROPTERUS.*

*Cuculus micropterus* Gould; Shelley, tom. cit. p. 236.

Specimens were collected both in the interior of Trang and on Langkawi.

105. *PENTHOCERYX SONNERATI.*

*Cuculus sonnerati* (Lath.); Shelley, tom. cit. p. 262.

♀. Chong, Trang, December 27th, 1910.

For some reason we have come across remarkably few specimens of this Cuckoo in the Peninsula, and it is possible that it is only numerous quite in the south, where Davison secured a fairly large series. It is obviously generically distinct from *Cuculus*, and, as Blanford (Faun. Brit. Ind., Birds, iii. p. 218, 1895) states, should certainly, if not kept distinct under the above name, be placed with *Cacomantis*, to which in the general character of the plumage it shews marked affinities.

106. *CACOMANTIS MERULINUS.*

*Cacomantis merulinus* (Scop.); Shelley, tom. cit. p. 268; Robinson, p. 177.

Abundant all over the Peninsula.

This Cuckoo is the local "Brain-Fever Bird," and has a trisyllabic note repeated three times on an ascending scale, which is singularly irritating. The species appears to be



present in the Peninsula throughout the year, but its numbers are greatly augmented during the winter months.

107. *CHALCOCOCCYX XANTHORHYNCHUS*.

*Chalcococcyx xanthorhynchus* (Horsf.) ; Shelley, tom. cit. p. 289.

A single female was obtained on the summit of the dividing range between Trang and the east coast States.

The Violet Cuckoo is rare in the Malay Peninsula, and the Selangor Museum possesses only three males from widely scattered localities.

108. *CHALCOCOCCYX MACULATUS*.

*Chalcococcyx maculatus* (Gm.) ; Shelley, tom. cit. p. 292.

Two females of the Emerald Cuckoo were secured in the same locality as the preceding. It is an even rarer bird than *C. xanthorhynchus*, and very few specimens indeed are on record from the Peninsula. Both are only found in dense jungle and are shy and retiring in their habits. A third member of the genus, *C. malayanus*, certainly, and a fourth, *C. basalis*, possibly, occur within our limits, but the records of the last are somewhat dubious.

109. *CENTROPUS SINENSIS*.

*Centropus sinensis* (Steph.) ; Shelley, tom. cit. p. 343 ; Robinson, p. 177.

Abundant in Trang, as elsewhere in the Peninsula, on waste ground and stretches of open country overgrown with high grass.

110. *EUDYNAMIS ORIENTALIS*.

*Eudynamis orientalis* (Linn.) ; Shelley, tom. cit. p. 322.

The Koël is evidently a migratory bird in the Peninsula, and in the central and southern portions is rarely found at any distance inland. It was very common indeed in Trang, up to the foot of the main range, in December 1909, and was also numerous on Pulau Paya, a small island between Langkawi and Kedah, in December 1907. On Pulau Jarah, in the middle of the Straits of Malacca, it was present in very large numbers in April 1906, probably on its way north.

111. RHOPODYTES TRISTIS.

*Rhopodytes tristis* (Less.); Shelley, tom. cit. p. 386; Robinson, p. 178.

*Rhopodytes tristis hainanus* Hartert, Nov. Zool. xvii. p. 218.

The large species of *Rhopodytes* was extremely common in Trang, where it was found in the gardens and the secondary jungle at low elevations, whereas in the Federated Malay States it is extremely rare and confined to the mountains.

I have already noted that the Malayan birds are very considerably smaller than the Indian (wing 5·9 against 6·5) and Dr. Hartert has now separated the Hainan bird on this account. In addition, Malayan examples are rather darker above, and are without the yellowish wash on the breast that is almost universal with Indian birds.

It will probably be found that the smaller race inhabits the whole of Siam, French Indo-China, and the Malay Peninsula including Hainan, and it is unfortunate that the subspecific name of "*hainanus*" should be applied to a form of very wide distribution.

112. RHOPODYTES DIARDI.

*Rhopodytes diardi* (Less.); Shelley, tom. cit. p. 370.

Very rare in Trang, whence we got only two specimens, and apparently supplanted by the large *R. tristis*; in the south of the Peninsula the reverse is the case.

113. ZANCLOSTOMUS JAVANICUS.

*Zanclostomus javanicus* (Horsf.); Shelley, tom. cit. p. 380; Robinson, p. 178.

The Red-billed Malkoha was very common in Trang, far more so than in the south of the Peninsula, where it is usually found at an elevation of about 2500 ft.

114. RHINORTHA CHLOROPHÆA.

*Rhinortha chlorophæa* (Raffles); Shelley, tom. cit. p. 393.

This is more of a jungle-bird than the other species of *Phœnicophainæ*, and is usually found in pairs frequenting the dense masses of creepers which cover certain trees. It is

especially fond of a species of *Melastomaceæ* with large pink flowers and sticky fruit, which it searches assiduously for insects. It hardly ever takes to flight, but climbs about the creepers and in and out of the dense foliage, and at a great height looks more like a squirrel than a bird.

115. *UROCOCCYX ERYTHROGNATHUS.*

*Urococcyx erythrogna* (Hartl.) ; Shelley, tom. cit. p. 178 ; Robinson, p. 178.

Common among bamboos on the banks of the river at Chong, Trang, and well distributed throughout the Peninsula.

CAPITONIDÆ.

116. *CALORHAMPHUS HAYI.*

*Calorhamphus hayi* (J. E. Gray) ; Shelley, tom. cit. p. 50 ; Robinson, p. 178.

Not nearly so common as further south.

117. *CHOTORHEA CHRYSOPOGON.*

*Chotorhea chrysopogon* (Temm.) ; Shelley, tom. cit. p. 57 ; Robinson, p. 179.

This Barbet, which was fairly common in the heavier jungle, does not appear to have been recorded from further north than Penang, a locality which is open to strong suspicion.

118. *CHOTORHEA VERSICOLOR.*

*Chotorhea versicolor* (Raffles) ; Shelley, tom. cit. p. 59 ; Robinson, p. 179.

Lam-ra, Trang, N. Malay Peninsula, January 1910.

Not so abundant as the preceding species.

119. *CHOTORHEA MYSTACOPHANES.*

*Cyanops mystacophanes* (Temm.) ; Shelley, tom. cit. p. 72 ; Robinson, p. 179.

Very numerous.

120. *MESOBUCCO CYANOTIS.*

*Mesobucco cyanotis* (Blyth) ; Shelley, tom. cit. p. 87.

Very numerous at every locality visited in the State ;

the birds that we shot ourselves were feeding in flocks on the fruit of a species of fig-tree which attains a very great height.

Individuals from Trang appear to be fairly typical, but this locality is very nearly the southern limit of the species. At Temengoh, in Northern Perak, specimens assignable both to this and the southern form, *M. duvauceli*, having the ear-coverts either blue or black or intermediate, are found. Many Selangor specimens have the ear-coverts faintly washed with verditer-blue, while in Malacca, Johor, and the Sunda Islands the typical black-eared form alone occurs.

121. *XANTHOLEMA HÆMATOCEPHALA.*

*Xantholæma hæmatocephala* (Müll.); Shelley, tom. cit. p. 89.

Very numerous, keeping more to the open country and to orchard land, but not found further south in the Malay Peninsula than Central Perak.

Its Malay name, *tukang besi*, the blacksmith bird, alludes to its gong-like notes, which are most characteristic sounds in the districts which it affects.

INDICATORIDÆ.

122. *INDICATOR ARCHIPELAGICUS.*

*Indicator archipelagicus* Temm.; Shelley, Cat. Birds Brit. Mus. xix. p. 4 (1891).

*Indicator malayanus* Sharpe, P. Z. S. 1878, pp. 794, 795; Hume, Stray Feathers, viii. p. 155; Robinson, p. 180.

*Indicator archipelagicus inornatus* Neumann, Bull. B. O. C. xxi. pp. 97, 98 (1908).

♀. Chong, Trang, N. Malay Peninsula, 30th December, 1909.

♀. Ginting Bidei, Selangor, 2300 ft., 13th May, 1908.

The Malayan Honey-Guide appears to be a species of extreme rarity, and after six years' collecting the Selangor Museum has only succeeded in obtaining the above-mentioned two specimens, while the two others known from the

Peninsula are a native skin from "Malacca," the type of *I. malayanus*, and another obtained by Davison at Klang, Selangor, the type of *I. archipelagicus inornatus*.

Shelley (*loc. cit.*) has described the female as similar in plumage to the male, on the strength of a specimen ("c" of the Catalogue) from Bintulu, Sarawak, sexed as such by Everett. It is, however, probable that this is an error and that the female differs from the male in the absence of the chrome-yellow shoulder-patch and possibly in the slightly smaller size.

The type of *I. malayanus* is not devoid of a shoulder-patch as stated by Sharpe, but has it only slightly marked and largely concealed by the method of preparation; it is probably a young male.

Neumann's race is evidently not valid, and no constant differences can be detected between the four specimens from the Peninsula now before me, and five from Borneo, which are not obviously due to age and sex.

Both the above-mentioned examples were shot by natives, one in the vicinity of a bees'-nest and both in deep jungle, but nothing else is known of the habits of the Malayan species.

#### PICIDÆ.

##### 123. GECINUS VITTATUS.

*Gecinus vittatus* (Vieill.); Hargitt, Cat. Birds Brit. Mus. xviii. p. 46 (1890).

Fairly common along the coast of the Peninsula from the Langkawi Islands southwards, especially where there are *Casuarina* trees, but rarely seen inland.

##### 124. GECINUS VIRIDANUS.

*Gecinus viridanus* Blyth; Hargitt, tom. cit. p. 47.

Common in Trang.

This species replaces *G. vittatus* northwards of the Langkawi group and also in the Patani States on the east of the Peninsula. The bird from the island of Salanga, *G. weberi* Müller (J. für Orn. 1882, p. 421), of which there are several

examples in the British Museum, in no way differs from the mainland form. Certain specimens are browner than others, but there are some from Burma and Tenasserim which exactly match them. Moreover the same variation occurs in the preceding species and is evidently of no diagnostic importance.

125. *GEVINUS OBSERVANDUS*.

*Gecinus puniceus* (part.) Hargitt, tom. cit. p. 64.

*Gecinus puniceus observandus* Hartert, Nov. Zool. iii. p. 542 (1896); Robinson, p. 180.

Not so common in the north as further south; we have only a single specimen from Lamra in the interior of Trang.

126. *CHRYSOPHLEGMA MALACCENSE*.

*Chrysophlegma malaccense* (Lath.); Hargitt, tom. cit. p. 122; Robinson, p. 183.

A single male from Krongmon, Trang, 17th February, 1910.

127. *CHRYSOPHLEGMA HUMII*.

*Chrysophlegma humii* Hargitt, tom. cit. p. 126.

Two or three specimens only were collected in Trang.

128. *IYNGIPICUS CANICAPILLUS*.

*Iyngipicus canicapillus* Blyth; Hargitt, tom. cit. p. 322.

A single specimen of this species, usually a coastal form, was shot in the interior of Trang. It shews no approach to the rather smaller species, with the central retrices unspotted, described from the north of the Peninsula, *I. pumilus*, Hargitt.

129. *PYRRHOPICUS PORPHYROMELAS*.

*Lepocestes porphyromelas* (Boie); Hargitt, tom. cit. p. 382.

Fairly common everywhere, and having a greater range in altitude than almost any other of the Malayan Woodpeckers.

130. *MIGLYPTES GRAMMITHORAX*.

*Miglyptes grammithorax* (Malh.); Hargitt, tom. cit. p. 385; Robinson, p. 182.

Very common in orchard land throughout the Peninsula,

especially affecting the trunks of the Jack-fruit tree (*Artocarpus integrifolia*).

131. TIGA JAVANENSIS.

*Tiga javanensis* (Ljung) ; Hargitt, tom. cit. p. 412.

Fairly common on the coast throughout the Peninsula, and almost invariably found in cocoa-nut groves.

132. CHRYSOCOLAPTES GUTTICRISTATUS.

*Chrysocolaptes gutticristatus* (Tick.) ; Hargitt, tom. cit. p. 448.

Common in the northern portions of the Peninsula and also, curiously enough, in the Rhio Archipelago, south of Singapore, but decidedly rare in the intervening country.

133. CHRYSOCOLAPTES VALIDUS.

*Chrysocolaptes validus* (Temm.) ; Hargitt, tom. cit. p. 458.  
Common nearly everywhere ; an exceedingly noisy bird.

134. HEMICERCUS SORDIDUS.

*Hemicercus sordidus* (Eyton) ; Hargitt, tom. cit. p. 482 ;  
Robinson, p. 183.

Rather scarce, but widely distributed throughout the Peninsula. *Hemicercus canente* is also found in the extreme north of the Peninsula, but we did not meet with it.

135. ALOPHONERPES PULVERULENTUS.

*Hemilophus pulverulentus* (Temm.) ; Hargitt, tom. cit. p. 494.

Not uncommon in certain localities, especially on Langkawi and Terutau, but very uncertain in its distribution. Only found, as a rule, in very lofty jungle, usually in the low country.

136. THRIPONAX JAVENSIS.

*Thripanax javensis* (Horsf.) ; Hargitt, tom. cit. p. 498.

Also local and somewhat rare, generally in low swampy jungle, and even in the mangroves, but occasionally found far inland among the foot-hills, though never in the high mountains.

137. *SASIA ABNORMIS.*

*Sasia abnormis* (Temm.) ; Hargitt, tom. cit. p. 557.

*Sasia everetti* Hargitt, tom. cit. p. 559, pl. xv.; Hartert, Nov. Zool. ix. p. 547 (1902); Robinson, p. 184.

Fairly common in Trang. Mr. Hargitt described a bird in immature plumage from Borneo as *S. everetti*, and Mr. Hartert has retained the name on account of the slightly larger beak possessed by Malayan and Bornean birds, the type-locality of the species being Java, but we doubt whether the distinction can be maintained.

PITTIDÆ.

138. *PITTA CÆRULEA.*

*Pitta cærulea* (Raffles); Sclater, Cat. Birds Brit. Mus. xiv. p. 416 (1888).

Our men secured five specimens in the interior of Trang.

With the exception of two examples obtained about 1888 in the coastal province of Larut, Perak, now in the Federated Malay States Museum, no recent collector has met with this species in the Malay Peninsula, though it is fairly well represented in the British Museum by "Malacca" trade-skins. It is probably commoner in the northern parts of the Peninsula, which have been very little searched of late years.

Our Dyaks describe it as having in the main the habits of other species of the genus, but to be a bird of much more active flight, which accords with Davison's observations.

139. *PITTA CYANOPTERA.*

*Pitta cyanoptera* Temm.; Sclater, tom. cit. p. 420.

Scarce at Chong, Trang; common during the winter months on the smaller islands of the Straits of Malacca, but rarer on the mainland. Not unfrequently captured at night at the lighthouses and occasionally alighting on ships passing down the Straits.

140. *PITTA MEGARHYNCHA.*

*Pitta megarhyncha* Schleg.; Sclater, tom. cit. p. 431.

This species is decidedly rare in the Peninsula and appears to keep to the littoral mangrove belt. We have obtained it



from Pulau Terutau in March, Pulau Karimon and Pulau Bintang in the Rhio Archipelago, south of Singapore, in August and June, while there is an old mounted specimen labelled "Pahang" in the Selangor Museum.

141. *PITTA CUCULLATA*.

*Pitta cucullata* Hartl. ; Sclater, tom. cit. p. 442.

A single specimen from Trang.

Like *P. cyanoptera* this species is common on the small islands during the winter, but is also found inland in considerable numbers, especially at the base of the limestone hills.

142. *EUCICHLA BOSCHI*.

*Eucichla boschi* (Müll. & Schleg.); Sclater, tom. cit. p. 447.

Exceedingly common wherever met with, but very local in its habits. We have specimens from several localities in Trang and from Larut, in Central and Lenggong and Temengoh in Upper Perak, mostly from the vicinity of limestone hills. Ridley records it from the caves of Khota Glanggi on the Pahang River.

143. *EUCICHLA GURNEYI*.

*Eucichla gurneyi* (Hume) ; Sclater, tom. cit. p. 448.

This most beautiful species was the commonest of the genus in Trang, and we secured over thirty specimens from several localities in the State. It has not as yet been met with in any part of the Peninsula under British influence.

The only other member of the family found in the Peninsula is *Pitta coccinea* Eyton, which we have only come across in one locality, viz. Rantau Panjang, in the low-country jungle of Central Selangor, where it was not uncommon, as we both obtained a pair and saw several others on subsequent occasions. The species is probably normally an inhabitant of rather swampy jungle, in which our collecting-parties have not as yet done much work.

EURYLÆMIDÆ.

144. CALYPTOMENA VIRIDIS.

*Calyptomena viridis* Raffles; Sclater, Cat. Birds, Brit. Mus. xiv. p. 456.

Not numerous in Trang.

145. CYMBIRHYNCHUS MALACCENSIS.

*Cymbirhynchus macrorhynchus* (Gm.); Sclater, tom. cit. p. 468 (partim).

*Cymbirhynchus malaccensis* Salvad. Atti R. Accad. Tor. ix. p. 425.

Very common within the littoral belt, in Trang as in the rest of the Peninsula.

It is a curious but undoubted fact that no species of Broad-bill is known from any of the smaller islands in the vicinity of the shores, such as the Tioman group on the east coast and the Langkawis, Pulau Jarak, and the Sembilans and Aroa Islands in the Straits of Malacca. The family is represented, it is true, on Penang and Singapore Islands, but here the dividing Straits are not more than three or four miles across, much less in the case of Singapore.

The same is true of the Barbets.

146. EURYLÆMUS OCHROMELAS.

*Eurylemus ochromelas* Raffles; Sclater, tom. cit. p. 465. Scarce.

HIRUNDINIDÆ.

147. HIRUNDO JAVANICA.

*Hirundo javanica* Sparrm.; Sharpe, Cat. Birds Brit. Mus. x. p. 142 (1885).

A male from Langkawi, obtained in June.

The species is resident in the Peninsula throughout the year. It is most abundant on some of the outlying islands.

148. HIRUNDO BADIA.

*Hirundo badia* (Cass.); Sharpe, tom. cit. p. 166.

This exceedingly handsome Swallow is resident throughout

the year in the Peninsula and is one of the very few lowland birds that are peculiar to the country. It is found only in the neighbourhood of the precipitous limestone hills and cliffs that are so characteristic a feature of the northern and central portions of the Peninsula. It nests among the rocks, generally at the entrance of or a little inside a cave, but we have not yet obtained the eggs.

## MUSCICAPIDÆ.

## 149. HEMICHELIDON FULIGINOSA.

*Hemichelidon sibirica* (Gm.); Sharpe, Cat. Birds Brit. Mus. iv. p. 120 (1879) (part.) ; Robinson, p. 186.

Fairly common at low elevations at Chong, Trang, at the foot of the main dividing-line, which here attains no great height. In other parts of the Peninsula we have met with it only in the winter months at not less than 2700 feet.

## 150. ALSEONAX LATIROSTRIS.

*Alseonax latirostris* (Raffles) ; Sharpe, tom. cit. p. 127 ; Robinson, p. 187.

Seen in large numbers along with the foregoing species ; also on Terutau and Langkawi in February and March.

## 151. CYORNIS MAGNIROSTRIS.

*Siphia magnirostris* (Blyth) ; Sharpe, tom. cit. p. 453.

One specimen sexed as female by the collectors, but probably an immature male, was shot on Chong Hill at about 2000 ft. on December 24th, and constitutes a new record for the Malay Peninsula.

## 152. CYORNIS SUMATRENSIS.

*Siphia sumatrensis* Sharpe, Cat. Birds B. M. iv. p. 451.

*Cyornis sumatrensis* Hartert, Nov. Zool. ix. p. 550 (1902).

This species has hitherto been known only from the type, a "Malacca" skin erroneously ascribed to Malacca, and Dr. Hartert's specimen from Sungei Lebeh in the lowlands of Kelantan. The following additional specimens are now before us :—

2 ♂, 2 ♀ ad. Chong, Trang, December, 1909.

♂ ad. Lamra, Trang, January 22nd, 1909.

♂ ad. Pulau Terutau, December 1907.

♀ vix. ad. Pulau Terutau, March 1909.

♂ ad., ♂ imm. Temengoh, Upper Perak, July 1909.

♀. Genting, near Kuala Lipis, Pahang, May 1910.

♂. Kuala Lumpur, Selangor, July 1907.

The males are distinguished from those of other allied species by their small size and by having the abdomen, under tail-coverts, axillaries, and under wing-coverts pure white, the orange of the breast is sharply defined from the white belly, and there is only a very small black chin-spot.

The female, which has not hitherto been described, has the upper surface bluish grey, bluer on the upper tail-coverts and tail, sides of the head greyish, with a white or buffy-white ring round the eye; remainder of the under surface, as in the male but the rufous of the breast is duller.

#### 153. *CYORNIS DIALILEMA*.

*Cyornis dialilæma* Salvad. Ann. Mus. Civ. Gen. xxvii. p. 387 (1889).

*Cyornis tickelli* (ex Kossoom), Oates, Faun. Brit. Ind., Birds, ii. p. 25 (1890).

We have with some doubt referred the four specimens from Kossoom mentioned by Oates *loc. cit.* and eight more skins from Trang to this species, which can only be regarded as a southern race of *C. tickelli*. The whole genus, however, is in a very unsatisfactory state and is much in need of revision. The present form is also closely allied to *C. sumatrensis*, from which it differs in the greater extent of black on the chin and in having the flanks and under tail-coverts tinged with fulvous.

There is probably a third undescribed species represented in the Trang collection, allied to *C. nigrigularis* of Borneo and Sumatra, but the material at our disposal is at present not sufficient to justify the bestowal on it of a name.

#### 154. *POLIOMYIAS LUTEOLA*.

*Pohomyias luteola* (Pall.); Sharpe, Cat. Birds B. M. iv. p. 201; Robinson, p. 188.

A winter visitor to the Peninsula, and abundant in certain districts from November to March.

The specimen of *Erythromyias muelleri* noted (Robinson, p. 188) as found dead on the coast of Kuantan, Pahang, which was obtained by Mr. W. H. Craddock and identified by the late Col. Bingham, turns out on examination of the skin to belong to this species.

155. CYANOPTILA CYANOMELÆNA.

*Xanthopygia cyanomelæna* (Temm.); Sharpe, Cat. Birds B. M. iv. p. 251; Robinson, p. 189.

A fine adult male was shot on Pulau Terutau by one of our collectors in March 1909. The species is evidently a rare winter visitor to the Peninsula.

156. HYPOTHYMIS AZUREA.

*Hypothymis azurea* (Bodd.); Sharpe, tom. cit. p. 274; Robinson, p. 189.

Evidently rare in Trang, where we got only two or three specimens. In the lowlands of Perak and Selangor it is one of the commonest members of the family.

157. TERPSIPHONE AFFINIS.

*Terpsiphone affinis* (Blyth); Sharpe, tom. cit. p. 349; Robinson, p. 190.

The Burmese Paradise Flycatcher is a common resident throughout the Peninsula south to Singapore, though its numbers are probably increased during the winter months by migrants from the north.

The two other species of this genus found in the Peninsula, *T. incii* Gould and *T. princeps* (Temm.), are both somewhat rare winter visitors.

158. PHILENTOMA PYRRHOPTERUM.

*Philentoma pyrrhopterum* (Temm.); Sharpe, tom. cit. p. 366; Robinson, p. 190.

Only one specimen was obtained in Trang. The species is everywhere rather scarce and not nearly so generally distributed as its congener *P. velatum*.

## 159. STOPAROLA THALASSINOIDES.

*Stoparola thalassinoides* (Cab.); Sharpe, tom. cit. p. 439; Robinson, p. 191.

Several specimens were obtained in Trang.

Since the date of my paper quoted above, we have obtained examples of this species in considerable quantities at two localities on the main range—Ulu Gombak in Selangor and Temengoh in Upper Perak. All appear to be referable to this form and not to the duller northern race *S. melanops*, which is of very doubtful occurrence in the Peninsula.

## 160. MUSCITREA GRISOLA.

*Pachycephala grisola* (Blyth); Gadow, Cat. Birds Brit. Mus. viii. p. 220 (1883).

*Muscitrea grisola* Oates, Faun. Brit. Ind., Birds, ii. p. 31 (1890).

We have obtained this somewhat rare Flycatcher from three localities, viz., the Langkawi group, Tanjong Karang on the coast of Selangor, and Singapore Island. In all cases the birds were shot on the edge of or in the middle of mangrove swamps, which probably accounts for its comparative rarity in collections.

## CAMPOPHAGIDÆ.

## 161. CAMPOPHAGA NEGLECTA.

*Campophaga neglecta* (Hume); Sharpe, Cat. Birds B. M. iv. p. 68 (1879); Oates, Faun. Brit. Ind., Birds, i. p. 493 (1889).

A few specimens were obtained in the interior of Trang in January 1909.

The species is replaced in other and more southern parts of the Peninsula by the closely allied *Lalage culminata* (A. Hay).

## 162. PERICROCOTUS FLAMMIFER.

*Pericrocotus flammifer* Hume; Sharpe, tom. cit. p. 74; Robinson, p. 192.

Evidently common at Trang at low levels. In the remaining parts of the Peninsula the species is very

numerous at medium elevations, 1500–3000 feet, but is rare above and below that level. At high elevations the prevalent species is *P. montanus* Salvad., while *P. igneus* is found in the low country and on the coast.

163. PERICROCOTUS CINEREUS.

*Pericrocotus cinereus* Lafr.; Sharpe, tom. cit. p. 83.

A migrant; common along the coast of the Peninsula, south to Malacca, during the winter months.

PYCNONOTIDÆ.

164. ÆGITHINA VIRIDISSIMA.

*Ægithina viridissima* (Bp.); Sharpe, Cat. Birds Brit. Mus. vi. p. 6 (1881).

165. ÆGITHINA TIPHIA.

*Ægithina tiphia* (Linn.); Sharpe, tom. cit. p. 7.

Both these Ioras are probably common enough in Trang, but our collections contain only a single specimen of each.

166. ÆTHORHYNCHUS LAFRESNAYI.

*Æthorhynchus lafresnayeri* (Hartl.); Sharpe, tom. cit. p. 14; Robinson, p. 192.

Commoner in Trang than in any other locality in which we have found the species.

A jungle-bird, in contradistinction to *Ægithina tiphia*, which inhabits orchards and cultivated land.

167. CHLOROPSIS ZOSTEROPS.

*Chloropsis zosterops* Vig.; Sharpe, tom. cit. p. 24; Robinson, p. 193.

Exceedingly common at Chong and well distributed over the whole of the Peninsula at medium and low elevations.

168. CHLOROPSIS CHLOROCEPHALA.

*Chloropsis chlorocephala* (Wald.); Sharpe, tom. cit. p. 28.

As common as *Ch. zosterops*; not found in the south of the Peninsula, where it is replaced by *Cl. icterocephala* (Less.).

169. CHLOROPSIS CYANOPOGON.

*Chloropsis cyanopogon* (Temm.) ; Sharpe, Cat. Birds B. M. vi. p. 32 ; Robinson, p. 193.

Rare in Trang.

170. IRENA CYANEA.

*Irena cyanea* Begbie ; Sharpe, tom. cit. p. 179 ; Robinson, p. 193.

Common in Pulau Langkawi and Pulau Terutau and in the Peninsula generally south of Trang.

171. IRENA PUELLA.

*Irena puella* (Lath.) ; Sharpe, tom. cit. p. 177.

Exceedingly abundant in the open park at Chong, flying in small flocks of five and six.

This "species" replaces *I. cyanea* in the northern parts of the Peninsula. The differences are very trivial, the present bird having much shorter under tail-coverts.

172. HEMIXUS CINEREUS.

*Hemixus cinereus* (Blyth) ; Sharpe, tom. cit. p. 52 ; Robinson, p. 193.

Only two specimens were obtained of this species, which is found only in the Malay Peninsula and Sumatra, not extending to Tenasserim.

173. HEMIXUS MALACCENSIS.

*Hemixus malaccensis* (Blyth) ; Sharpe, tom. cit. p. 52 ; Robinson, p. 194.

Also rare in Trang.

The Bulbuls of this genus are forest and jungle birds, and are not found in orchards and cultivated land like the species of *Pycnonotus* and some others, notably *Otocompsa emeria* and *Trachycomus ochrocephalus*.

174. IOLE OLIVACEA.

*Iole olivacea* Blyth ; Sharpe, tom. cit. p. 55 ; Robinson, p. 194.

Three specimens of this species collected in Trang are perfectly typical and do not approach the greener Tenasserim bird *I. viridescens* Blyth, as might perhaps be expected.



## 175. MICROPUS MELANOCEPHALUS.

*Microtarsus melanocephalus* (Gm.) ; Sharpe, tom. cit. p. 65.

Swarming in the gardens at Chong on almost every tree, and very common throughout the Peninsula in suitable localities.

## 176. CRINIGER TEPHROGENYS.

*Criniger tephrogenys* (Jard. & Selby) ; Sharpe, tom. cit. p. 71 (footnote) ; Robinson, p. 194.

Fairly numerous, more so than the next species.

## 177. CRINIGER SORDIDUS.

*Criniger sordidus* Richmond, Proc. U.S. Nat. Mus. xxii. p. 320 (1900).

*Criniger ochraceus* (partim) Robinson, p. 195.

This species, originally described from Trang, can perhaps be differentiated from *C. ochraceus* of more southern localities by its browner ear-coverts and by having the white of the throat less sharply defined from the rest of the under parts, but the distinctions are extremely fine. We have it from Langkawi as well as from Trang, and have examined one of Richmond's typical series, which is now in the Selangor Museum.

## 178. ALOPHOIXUS PHÆOCEPHALUS.

*Alophoixus phæocephalus* (Hartl.) ; Oates, Faun. Brit. Ind., Birds, i. p. 259 (1889) ; Robinson, p. 195.

*Criniger phæocephalus* (Hartl.) ; Sharpe, tom. cit. p. 74.

## 179. TRICHOLESTES CRINIGER.

*Tricholestes criniger* (Blyth) ; Sharpe, tom. cit. p. 89 ; Robinson, p. 195.

Both these species are poorly represented in our Trang Collection, and are probably rare in the State.

## 180. PYCNONOTUS ANALIS.

*Pycnonotus analis* (Horsf.) ; Sharpe, tom. cit. p. 140.

In the south of the Peninsula this is the commonest garden bird next to *Copsychus musicus*, while *Otocompsa emeria* is almost unknown. In the north the position is quite

reversed, and while *Otocompsa* was everywhere in evidence we only came across two or three specimens of the Yellow-vented Bulbul.

## 181. PYCNONOTUS FINLAYSONI.

*Pycnonotus finlaysoni* Strickl. ; Sharpe, tom. cit. p. 144 ; Robinson, p. 195.

Rather rare in the south, but very common in Trang and Pulau Terutau and Langkawi.

## 182. PYCNONOTUS PLUMOSUS.

*Pycnonotus plumosus* Blyth ; Sharpe, tom. cit. p. 152.

## 183. PYCNONOTUS SIMPLEX.

*Pycnonotus simplex* Less. ; Sharpe, tom. cit. p. 153 ; Robinson, p. 196.

## 184. PYCNONOTUS SALVADORII.

*Pycnonotus pusillus*, Salvad. ; Sharpe, tom. cit. p. 155.

All three of these Bush-Bulbuls are represented in the collections. They are very generally distributed throughout the Peninsula, the first-mentioned being the rarest of the three.

## 185. OTOCOMPSA EMERIA.

*Otocompsa jocosa* (Linn.) ; Sharpe, tom. cit. p. 157.

This attractive Bulbul was exceedingly common at Trang, and, as I have noted above, appears to take the place of *Pycnonotus analis* of the southern States.

The bird is exceedingly proud of its crest, and takes every opportunity of displaying it, selecting a bare twig at the top or on the side of a tree and erecting its crest vertically over its head in the manner of a Lapwing. This species is much admired by the natives, and is not a uncommon cage-bird among the Chinese of Penang. Indeed at a recent "Agri-Horticultural" show a specimen of it received the first prize as the rarest and finest cage-bird in the show. The judges evidently were not ornithologists and were apparently ignorant of the fact that the bird was on free view daily in their own gardens !!

## 186. RUBIGULA WEBBERI.

*Rubigula webberi* (Hume); Sharpe, tom. cit. p. 171; Robinson, p. 196.

Fairly common at Trang.

In the paper quoted above we stated that we had only seen one specimen of this species from the Western Federated Malay States, but before the paper had been actually issued we had obtained some dozens of the species from two widely separated localities, Temengoh in Upper Perak and Ulu Gombak in Selangor, at altitudes of about 1000–1500 feet. The species is exceedingly fond of the fruit of certain figs, and when such a tree bearing ripe fruit is discovered any number of the birds can be obtained.

## TIMELIIDÆ.

## 187. POMATORHINUS OLIVACEUS.

*Pomatorhinus olivaceus* Blyth; Sharpe, Cat. Birds Brit. Mus. vii. p. 414 (1883).

By no means common, only three or four specimens having been obtained; replaced by *P. wrayi* Sharpe in the mountains of the central and southern portion of the Peninsula, and by *P. borneensis* Cab. in the lowlands.

## 188. PELLORNEUM SUBOCHRACEUM.

*Pellorneum subochraceum* Swinh.; Sharpe, tom. cit. p. 521; Oates, Faun. Brit. Ind., Birds. i. p. 143 (1889).

Very common among brushwood and low secondary jungle near the ground, and also met with in the Langkawi Archipelago. The species is very rare south of Taiping, but is fairly numerous near that town; the most southerly locality known is Slim in Southern Perak.

## 189. TURDINUS ABBOTTI.

*Turdinus abboti* (Blyth); Sharpe, tom. cit. p. 541; Robinson, p. 198.

Rather scarce in Trang and on Langkawi; more abundant in the south, together with the allied *T. sepiarius*.

190. TURDINUS MACRODACTYLUS.

*Turdinus macrodactylus* (Strickl.); Sharpe, tom. cit. p. 548; Robinson, p. 199.

Very local in distribution throughout the Peninsula, Trang being the northern limit of the species. It keeps to dense jungle and is, together with *T. loricatedus*, more terrestrial and less arboreal in its habits, as indicated by the large and powerful feet.

191. ERYTHROCICHLA BICOLOR.

*Erythrocichla bicolor* (Less.); Sharpe, tom. cit. p. 551.

Widely distributed in the low country; commonest in the central portions of the Peninsula.

192. DRYMOCATAPHUS NIGRICAPITATUS.

*Drymocataphus nigricapitatus* (Eyton); Sharpe, tom. cit. p. 554; Robinson, p. 200.

Rare in Trang.

193. DRYMOCATAPHUS TICKELLI.

*Drymocataphus tickelli* (Blyth); Sharpe, tom. cit. p. 557; Robinson, p. 200.

Fairly common in Trang.

Widely distributed throughout the Peninsula as far south as Selangor from the foot of the range up to about 4000 feet, principally in bamboo jungle.

194. SETARIA MAGNIROSTRIS.

*Turdinus magnirostris* (Moore); Sharpe, tom. cit. p. 547.  
*Setaria magnirostris* Robinson, p. 200.

Widely distributed throughout the Peninsula up to about 2500 feet and on Pulau Tioman.

195. ANUROPSIS MALACCENSIS.

*Anuropsis malaccensis* (Hartl.); Sharpe, tom. cit. p. 588; Robinson, p. 200.

This bird approaches the northern limit of its range in Trang, only two specimens having been obtained in the interior of the State.

196. *Turdinulus granti*.

*Turdinulus excsul* (part.), Grant, Ibis, 1895, p. 60.

*Turdinulus humei* Hartert, Nov. Zool. ix. p. 564 (1902);  
Robinson, Journ. Fed. Malay States Mus. i. p. 26 (1905).

*Turdinulus granti* Richmond, Proc. U.S. Nat. Mus. xxii.  
p. 320 (1900); Robinson, p. 201.

We made a special point of obtaining a series of this species and secured about seven specimens. As Mr. Grant has noted, they are quite conspecific with the specimens from more southern localities described by Mr. Hartert as *T. humei*. Throughout its range, which extends to Southern Johor, the species is fairly common in certain localities up to about 2600 feet. Above this altitude its place is taken by *Corythocichla leucosticta* Sharpe, which is identical with it in habits.

197. *Corythocichla leucosticta*.

*Corythocichla leucosticta* Sharpe, P. Z. S. 1887, p. 438;  
Robinson, p. 201.

Two specimens from the interior of Trang agree exactly with a series from the mountains of Perak, Selangor, and Pahang, and shew no approach to *Corythocichla striata*.

198. *Alcippe cinerea*.

*Alcippe cinerea* Blyth; Sharpe, Cat. Birds B.M. vii. p. 622;  
Robinson, p. 201.

Rare, only two specimens were obtained.

199. *Alcippe phayrei*.

*Alcippe phayrei* Blyth; Sharpe, tom. cit. p. 623.

We did not ourselves obtain examples of this species; there is, however, in the Selangor Museum, a pair, obtained in exchange from the United States National Museum, collected by Dr. Abbott in the State.

200. *Stachyris davisoni*.

*Stachyris davisoni* Sharpe, Bull. B. O. C. i. p. vii (1892);  
Robinson, p. 202.

We obtained two specimens of this Babbler on the hills above Chong. They agree exactly with the original type

and with other specimens from the typical locality and various places in the Southern Malay Peninsula. *Stachyris davisoni*, however, intergrades with the Himalayan *S. nigriceps* Hodgs., and specimens from Northern Tenasserim are very difficult to assign to the one or the other.

201. *STACHYRIS POLIOCEPHALA*.

*Stachyris poliocephala* (Temm.) ; Sharpe, Cat. Birds B. M. vii. p. 534 ; Robinson, p. 202.

202. *STACHYRIS NIGRICOLLIS*.

*Stachyris nigricollis* (Temm.) ; Sharpe, tom. cit. p. 535 ; Robinson, p. 202.

Both these species were evidently rather rare in Trang, though they are very common in the southern States.

203. *KENOPIA STRIATA*.

*Kenopia striata* (Blyth) ; Sharpe, tom. cit. p. 573.

Our men obtained two specimens in Trang, but though the type was from Singapore, we have no specimens from Perak or Selangor.

204. *MIXORNIS GULARIS*.

*Mixornis gularis* (Raffles) ; Sharpe, tom. cit. p. 576 ; Robinson, p. 203.

Common in the Langkawi group, whence the specimens shew a decided approach to the Indian and Burmese *M. rubricapilla*. A single specimen from Trang much more closely resembles *M. gularis* from the southern portions of the Peninsula.

205. *CYANODERMA ERYTHROPTERUM*.

*Mixornis erythroptera* (Blyth) ; Sharpe, tom. cit. p. 580.

Rare in Trang, but common, especially in the coastal districts, in the more southern portion of the Peninsula.

206. *MYIOPHONEUS CRASSIROSTRIS*.

*Myiophoneus crassirostris* Robinson, Bull. B. O. C. xxv. p. 98 (1910).

This species is only slightly differentiated from the Burmese *M. eugenei* Hume, from which it is separated principally by

its very much coarser bill. With regard to the two other Malayan species, it can be at once distinguished from *M. robinsoni*, confined to the high mountains, by its very much larger size, and from *M. dicrorhynchus*, which is also found in Sumatra, by its much more brilliant coloration.

The species is very common on Langkawi and Terutau, whence we have received large series, and less abundant in Trang, where only three or four were collected. Like the other species of the genus it keeps to rocky hills and gullies covered with deep jungle. *M. dicrorhynchus*, the species with which we are best acquainted, is common on the limestone cliffs near Kuala Lumpur, where it feeds on snails. Their shells are broken on the rocks, each bird apparently using one particular spot for the purpose, with the result that large piles of debris accumulate.

207. *HERPORNIS ZANTHOLEUCA*.

*Herpornis zantholeuca* Hodgs. ; Sharpe, tom. cit. p. 636.

A single specimen was obtained on the Langkawi group in the earlier part of 1909. Elsewhere on the Peninsula the species is common at medium elevations, being met with in small flocks on the smaller trees.

TURDIDÆ.

208. *GEOCICHLA CITRINA*.

*Geocichla citrina* (Lath.) ; Seebohm, Cat. Birds Brit. Mus. v. p. 172 (1881).

A large series of this and the succeeding species was collected at various places in Trang during December, January, and February. We have also obtained it from Langkawi and Terutau in the months of February and March.

209. *GEOCICHLA INNOTATA*.

*Geocichla innotata* (Blyth) ; Seebohm, tom. cit. p. 176 ; Oates, Faun. Brit. Ind., Birds, ii. p. 141 (1890) ; Robinson, p. 206.

A few specimens from Trang lack the white spots to the

wing-coverts and are therefore referable to this species; the character, however, is so variable that we rather doubt if the form can be maintained even as a subspecies. It is significant that in the southern part of its range the species is one of the most extreme rarity, and that no recent collector has met with it, though it has been specially searched for during the last seven years. The British Museum possesses no exactly localized or authenticated specimens from any peninsular locality other than "Malacca," which is vague and unsatisfactory.

210. *TURDUS* *OBSCURUS*.

*Merula obscura* (Gm.); Seebohm, Cat. Birds Brit. Mus. v. p. 273.

Quite common in Trang, more so than further south.

211. *PETROPHILA* *SOLITARIA*.

*Monticola solitaria* (Müll.); Seebohm, tom. cit. p. 319.

*Petrophila solitaria* Robinson, p. 207.

A single specimen was shot at Kantan, Trang, near the coast of Trang, in December.

We have examples of this species also from Pulau Pandan, between Langkawi and Terutau. It has not been recorded from anywhere south of the Larut Range in Perak.

212. *HYDROCICHLA* *FRONTALIS*.

*Hydrocichla frontalis* (Blyth); Sharpe, Cat. Birds Brit. Mus. vii. p. 321 (1885).

Ko-khau, Trang, North Malay Peninsula, January 10th, 1910.

Rarer than *Henicurus schistaceus* and *Hydrocichla ruficapilla*, the only other Fork-tails whose occurrence in the Peninsula rests on well-authenticated specimens, the records of *Henicurus leschenaulti* and *H. sinensis* being open to very considerable suspicion.

213. *LARVIVORA* *CYANEA*.

*Erithacus cyaneus* Seebohm, Cat. Birds B. M. v. p. 303; Robinson, p. 207.

Very numerous in all the inland localities in Trang.



A winter visitor to the Malay Peninsula, generally distributed but commoner on the hills than in the plains.

214. *COPSYCHUS MUSICUS.*

*Copsychus musicus* (Raffles); Robinson, p. 208.

*Copsychus saularis* (partim) Sharpe, Cat. Birds B. M. vii. p. 61.

Though it occurs in Trang, the Dial-bird, or Straits Robin, is much rarer than in Selangor, where it is the commonest and most familiar of garden birds.

It was met with, though sparingly, on the Langkawi Islands.

215. *CITTOCINCLA MACRURA.*

*Cittocincla tricolor* (Vieill.); Sharpe, tom. cit. p. 85.

*Cittocincla macrura* (Gm.); Robinson, p. 208.

Common, both at Trang and on the Langkawis.

The Shama is another of the Malayan birds that is especially numerous on the outlying islands, probably because they afford the rocky jungle-covered hill-sides that the bird generally frequents. On Pulau Tioman, off the east coast of the Peninsula, it is so numerous as to be almost the dominant species.

SYLVIIDÆ.

216. *PHYLLOSCOPUS TENELLIPES.*

*Phylloscopus tenellipes* Swinh.; Seebohm, Cat. Birds B. M. v. p. 46 (1881).

*Acanthopneuste tenellipes* Oates, Faun. Brit. Ind., Birds, i. p. 416 (1889).

Two specimens of a Pale-legged Willow-Warbler obtained at Chong and on the hills above it agree perfectly with the series of this species in the British Museum from Tenasserim and China. The present locality is the most southerly recorded for the species.

217. *PHYLLOSCOPUS BOREALIS.*

*Phylloscopus borealis* (Blas.); Seebohm, tom. cit. p. 40.

*Acanthopneuste borealis* Oates, tom. cit. p. 412.

Four or five specimens were obtained. The species is the most generally distributed of the genus in the Malay Peninsula, but they are all rare except in the extreme north.

218. PHYLLOSCOPUS SUPERCILIOSUS.

*Phylloscopus superciliosus* (Gm.); Seebohm, tom. cit. p. 68; Oates, tom. cit. p. 409.

Four specimens of this species, not hitherto recorded from the Malay Peninsula, though obtained in Trang by Dr. Abbott (*Richmond, in litt.*).

219. PHYLLOSCOPUS CORONATUS.

*Phylloscopus coronatus* (Temm. & Schleg.); Seebohm, tom. cit. p. 49.

*Acanthopneuste coronata* Oates, tom. cit. p. 416; Robinson, p. 208.

Three specimens only.

220. ORTHOTOMUS RUFICEPS.

*Orthotomus ruficeps* (Temm.); Sharpe, Cat. Birds Brit. Mus. vii. p. 224 (1883).

♂. Chong, Trang, North Malay Peninsula, December 1909.

Decidedly a rare bird. In six years we have obtained two other specimens only, at Temengoh in North Perak, in August 1909, and at Cheras near Kuala Lumpur, Selangor, in March 1908.

221. ORTHOTOMUS ATRIGULARIS.

*Orthotomus atrigularis* (Temm.); Sharpe, tom. cit. p. 220; Robinson, p. 208.

Not met with in Trang, but common in the Langkawi group of islands.

222. SUTORIA MACULICOLLIS.

*Sutoria maculicollis* (F. Moore); Sharpe, tom. cit. p. 218; Robinson, p. 208.

A female from Lam-ra in the interior of Trang, shot on January 22nd, was the only specimen obtained.

223. LOCUSTELLA LANCEOLATA.

*Locustella lanceolata* (Temm.); Seebohm, Cat. Birds B. M. v. p. 118.

A single specimen was procured in the interior of Trang. Elsewhere in the Peninsula we have obtained this species on

the hills, as well as on the coast of Selangor and in the Aroa Islands, in the middle of the Straits of Malacca, during the winter months.

224. *FRANKLINIA RUFESCENS.*

*Cisticola beavani* (Wald.); Sharpe, Cat. Birds B. M. vii. p. 225.

*Franklinia rufescens* (Blyth); Robinson, p. 208.

♀. Tap-tien, Trang, North Malay Peninsula, 1st December, 1909.

Widely distributed both in the mountains and plains, as far south as Selangor, during the winter months only.

STURNIDÆ.

225. *EULABES JAVANENSIS.*

*Mainatus javanensis* (Osbeck); Sharpe, Cat. Birds Brit. Mus. xiii. p. 102 (1890).

The large Mynah is fairly common in well-wooded country throughout the Peninsula, and was especially abundant on Pulau Tioman and on the Langkawi group. It is social in its habits, flying and feeding in parties of six or seven. It nests in holes in dead trees, usually very high up and generally inaccessible.

As elsewhere where the genus occurs, it is a favourite cage-bird, and can readily be taught to talk, clever birds commanding a very high price.

226. *EULABES INTERMEDIUS.*

*Mainatus intermedius* (A. Hay); Sharpe, tom. cit. p. 66; Bonhote, P. Z. S. 1901, p. 66.

We secured two specimens of the smaller Grackle in Trang, the first, curiously enough, that we have as yet obtained, though we have made a point of shooting one or two of the genus in every locality visited.

It is distinguishable at a glance from *E. javanensis* by its very much smaller size, especially in the bill, and by the form of the lappets, which are quite different in the two species.

*Eulabes intermedius* appears to be essentially a northern

species, and though specimens from Klang, Malacca, and Singapore are catalogued by Sharpe as belonging to this species and not to *E. javanensis*, examination of them and also of the specimens from Kossoom shews that they are, on the whole, nearer to the latter species.

227. *ÆTHIOPSAR FUSCUS*.

*Æthiopsar fuscus* (Wagl.); Sharpe, tom. cit. p. 86.

Common on the plains of Trang.

This Mynah extends as far south as Taiping in Perak, where it is fairly common, and we have obtained a single specimen from Jeram on the Selangor coast, whence Davison also obtained it; but south of this it is unknown, the skin in the British Museum from Malacca (*Cantor*) being of uncertain origin.

It is known to Malays as the *burong gembala kerbau*, "the herdsman of the buffaloes," from the fact that wherever it is found in the Malay Peninsula it is, like the Cattle-Egret, almost invariably in attendance on domestic cattle.

228. *CALORNIS CHALYBEA*.

*Calornis chalybea* (Horsf.); Sharpe, tom. cit. p. 143.

The Glossy Starling is widely distributed throughout the country, though in some localities it is comparatively scarce or even absent. In many places it takes possession of the houses, as does the English Starling, and nests in the eaves or under the roof. In other localities it makes its large untidy nests in the crowns of the areca palms. It is abundant on all the islands, especially Pulau Aor of the Tioman group, birds from that locality being distinguished by their exceptionally large bills.

229. *AMPELICEPS CORONATUS*.

*Ampeliceps coronatus* Blyth; Sharpe, tom. cit. p. 116.

This handsome Golden-headed Mynah was found in large numbers in the interior of Trang, this being the southernmost recorded locality. It has also been obtained on the island of Salanga or Tongkah, rather to the north (*vide Müller, J. f. O. 1882, p. 388*).

## LANIIDÆ.

## 230. HEMIPUS PICATUS.

*Hemipus picatus* (Sykes); Sharpe, Cat. Birds Brit. Mus. iii. p. 307 (1877); Robinson, p. 209.

Numerous in Trang in orchards at low elevations.

Further south in the Peninsula in Selangor this species is only found at elevations over 3000 feet, *Hemipus obscurus* (Horsf.) being the low-country species. In North Perak at Temengoh in July both species were found together in jungle-country of no great elevation, while in Trang the present species alone was met with.

## 231. TEPHRODORNIS GULARIS.

*Tephrodornis gularis* (Raffles); Sharpe, tom. cit. p. 278; Robinson, p. 209.

Very common at Trang and throughout the rest of the Peninsula to Singapore at medium elevations up to 2600 feet. Found in pairs or occasionally in small flocks and usually in very lofty trees.

## 232. PLATYLOPHUS ARDESIACUS.

*Platylophus ardesiacus* (Cab.); Sharpe, tom. cit. p. 317; Robinson, p. 209.

Very abundant throughout the Peninsula in thick jungle, but not at any great height in the mountains.

## 233. LANIUS CRISTATUS.

*Lanius cristatus* Linn.; Gadow, Cat. Birds Brit. Mus. viii. p. 271 (1883).

Immature birds of this species were very common in those parts of Trang visited by us. It is generally distributed throughout the Peninsula during the winter months, but adults are rare.

## 234. LANIUS LUCIONENSIS.

*Lanius lucionensis* Linn.; Gadow, tom. cit. p. 274.

Very rare in the Peninsula; we have ourselves come across two specimens only—a female adult shot on Langkawi in March 1909 and an adult from Kuala Lumpur dated March 1907.

## PARIDÆ.

## 235. MELANOCHLORA FLAVOCRISTATA.

*Melanochlora flavocristata* (Lafr.); Hellmayr, Tierreich, Paridæ, p. 31 (1903); Robinson, p. 210.

*Melanochlora sultanea* (part.) Gadow, Cat. Birds Brit. Mus. viii. p. 6 (1883).

Mr. Hellmayr regards the Malayan form of the Sultan Tit as subspecifically distinct from the Himalayan and Burmese bird *M. sultanea* under the above given name, on account of its smaller size. He gives the wing as 100–107 mm., as against 110–115 mm. in the northern bird.

Five males from various parts of the Malay Peninsula measure from 98·5–104·5 mm. in the wing, as against an average of 112 mm. in a similar number of birds from Sikkim.

The species was rather scarce in Trang, and we only got three or four specimens. Elsewhere in the Peninsula it is widely distributed, chiefly in the foot-hills and up to about 3000 feet. It flies in small flocks in the jungle or at the edge of jungle clearings.

## SITTIDÆ.

## 236. DENDROPHILA SATURATION.

*Sitta frontalis saturation* Hartert, Nov. Zool. ix. p. 573 (1902).

*Dendrophila saturation* Robinson, p. 210.

This species occurs in Trang, whence we have a male obtained by Dr. Abbott and another from Lam-ra secured by our own men on January 26th, 1910.

Dr. Abbott's specimen is very pale beneath, almost matching true *D. frontalis* in this respect, but specimens from Bankasoon in the extreme south of Tenasserim are almost as dark as some of the darker Malayan specimens.

We have compared a series of about sixteen Peninsular specimens with the types of the species from Java and with other skins from the Himalayas, Central and Southern India,

Burma, Assam, and Palawan, and find that the differences as noted by Dr. Hartert, viz. the much richer colouring of the upper and lower surfaces, are fairly constant. Curiously enough, a specimen from the type-locality of the subspecies, Gunung Tahan, is paler than any of the others.

The form is separated from *D. corallipes* of Borneo by its brownish-black feet, and from *D. aenochlamys* of some of the Philippine Islands by its red, not greenish beak, the uniform back and mantle, and the absence of a white loreal spot.

## CORVIDÆ.

## 237. CORVUS MACRORHYNCHUS.

*Corone macrorhynchus* (Wagl.); Sharpe, Cat. Birds Brit. Mus. iii. p. 38 (1877).

The Common Jungle-Crow was very abundant in Trang and also in Langkawi and Terutau.

In the southern half of the Peninsula it is scarcer, being only seen in numbers on the coast in the vicinity of the fishing villages.

From Perak southwards to Johor the Slender-billed Crow, *Corvus enca* Horsf., occurs, but is very rare, only three or four specimens having been obtained.

## 238. PLATYSMURUS LEUCOPTERUS.

*Platysmurus leucopterus* (Temm.); Sharpe, tom. cit. p. 90.

Fairly numerous in Trang in the secondary jungle, but not so common as in some of the more southerly districts. Known to Malays as the *burong kambing* (goat-bird) from its harsh call.

## DICRURIDÆ.

## 239. DISSEMURUS PARADISEUS.

*Dissemurus paradiseus* (Linn.); Sharpe, tom. cit. p. 225; Robinson, p. 211.

Very common everywhere throughout the Peninsula, especially in bamboo-forest.

Exceptionally numerous on certain of the smaller islands.

## 240. DICRURUS ANNECTANS.

*Dicrurus annectans* (Hodgs.); Sharpe, tom. cit. p. 231; Robinson, p. 211.

Imm. Chong, Trang, N. Malay Peninsula, 7th December.

A migratory bird, common all over the Peninsula and the outlying islands during the winter months.

## 241. DICRURUS LEUCOGENYS.

*Buchanga leucogenys* Walden; Sharpe, tom. cit. p. 251.

*Dicrourus leucogenys* var. *salangensis* Rehnw. Nomencl. Mus. Hein. p. 69 (1890).

The White-checked Drongo was abundant at most of the places visited in Trang, and is possibly resident there. It has been recorded from as far down the Peninsula as Malacca, but in the south it is a rare bird and probably only a winter visitor.

The variety *salangensis* described by Reichenow from the island of Salanga—or Tongkah, as it is more usually called—to the north of Trang, as having the sides of the face ashy and not white, is obviously based on an immature specimen. An adult from Salanga in the British Museum agrees in every respect with the typical specimens from Tenasserim and the mainland of the Peninsula.

## ORIOLIDÆ.

## 242. ORIOLUS INDICUS.

*Oriolus indicus* Jerd.; Hume, Stray Feathers, viii. p. 63 (1879); Oates, Birds Brit. Burm. i. p. 211 (1883).

*Oriolus diffusus* Sharpe, Cat. Birds Brit. Mus. iii. p. 197 (1878).

Fairly abundant at all our collecting-stations in Trang in December and January. The species is not resident in the Peninsula, only occurring during the winter months, and has not as yet been met with further south than Malacca.

## 243. ORIOLUS MELANOCEPHALUS.

*Oriolus melanocephalus* Linn.; Sharpe, tom. cit. p. 215; Hume, Stray Feathers, viii. p. 156 (1879) (Tonka).

An adult male and an immature female, obtained on



Pulau Langkawi in March 1909, constitute the most southerly record for this species.

244. *ORIOIUS ZANTHONOTUS*.

*Oriolus zanthonotus* Horsf. ; Sharpe, tom. cit. p. 213.

Common over the greater portion of the Peninsula, but becoming rather scarcer to the north of the Peninsula and evidently rather rare in Trang.

MOTACILLIDÆ.

245. *MOTACILLA MELANOPE*.

*Motacilla melanope* Pall. ; Sharpe, Cat. Birds Brit. Mus. x. p. 497 (1885).

The Grey Wagtail was met with in flocks among the rice-fields at Chong in December.

It is found throughout the Malay Peninsula and outlying islands from August to April.

246. *MOTACILLA BOREALIS*.

*Motacilla borealis* Sundev. ; Sharpe, tom. cit. p. 523 ; Grant, Fasc. Malay Zool. iii. p. 71 (1905).

*Budytes cinereocapillus* (*nec* Savi), Hume, Stray Feathers, viii. pp. 65, 161 (1879).

A single young female was shot at Chong from among a number of *M. melanope*, the present form being very much rarer in the Peninsula than that species. The British Museum contains immature specimens from Ban Sai Kau and Nawnchik near Patani on the east coast of the Peninsula, shot in September and November ; an adult from Kosoom, north of Trang, shot in April ; and another adult from Klang, dated 20.vi.79. Both the latter are in full breeding-plumage.

247. *LIMONIDROMUS INDICUS*.

*Limonidromus indicus* (Gm.) ; Sharpe, tom. cit. p. 532 ; Robinson, p. 212.

One or two specimens were obtained, but in Trang, as elsewhere in the Peninsula, the Forest-Wagtail is by no means common, probably remaining for a short time only

during the winter months. It may be of interest to record that on December 25th and 26th, 1908, the species occurred literally in thousands on the summit of the Larut Hills, Perak, at an elevation of 4500 feet, after wind and heavy rain. On the 26th not a single bird remained.

## 248. ANTHUS MALAYENSIS.

*Anthus malayensis* Eyton, P. Z. S. 1839, p. 104.

*Anthus rufulus* (part.), Sharpe, tom. cit. p. 574.

The Malayan Pipit, as everywhere else in the Peninsula, was abundant on the rice-fields and other open spaces in Trang.

## 249. ANTHUS MACULATUS.

*Anthus maculatus* Hodgs.; Sharpe, tom. cit. p. 547; Butler, Journ. Straits Branch Roy. Asiatic Soc. xxxii. p. 21 (1899); Robinson, p. 212.

Our men obtained two specimens of the Indian Tree-Pipit in low jungle near Chong in December 1909. With the exception of the specimens recorded by Butler (*loc. cit.*) from the Larut Hills in Perak, the species has not hitherto been obtained in the Malay Peninsula.

## NECTARINIIDÆ.

## 250. ÆTHOPYGA SIPARAJA.

*Æthopyga siparaja* (Raffles); Gadow, Cat. Birds Brit. Mus. ix. p. 21 (1884).

♂. Chong, Trang, N. Malay Peninsula, Dec. 1909.

♂. Lamra, „ „ „ „ „ Jan. 1910.

This Sun-bird is sparingly distributed throughout the Peninsula at low elevations from the Tenasserim border to Singapore. It is most common in the vicinity of the coast and on the small islands, especially at Singapore and Penang. Further in the interior, and at elevations up to about 3000 or 4000 feet, its place is taken by the succeeding species.

The specimens enumerated above, and indeed all those in the British Museum from the northern portion of the Peninsula, are not typical *Æ. siparaja*, but shew a marked approach to *Æ. cara* (Hume, 'Stray Feathers,' ii. p. 473, 1874) in

having the crown, upper tail-coverts, and tail strongly tinged with metallic greenish, not rich violet as in more southern specimens. The rump also is paler, less orange, yellow, but these characters are not very constant

251. *ÆTHOPYGA TEMMINCKI*.

*Æthopyga temmincki* (S. Müll.) ; Gadow, tom. cit. p. 16 ; Robinson, Journ. Fed. Malay States Mus. i. p. 28 (1905) ; id. op. cit. ii. p. 213 (1909).

♂. Hills above Chong, Trang, N. Malay Peninsula, Dec. 1909.

This species also is generally distributed throughout the Peninsula from the above mentioned locality, which is the northernmost recorded, to Gunong Angsi in Negri Sembilan. It is not met with in the low country nor, on the other hand, at great elevations, where the genus is represented by *Æ. anomala* or *Æ. wrayi*.

252. *ÆTHOPYGA ANOMALA*.

*Æthopyga anomala* Richmond, Proc. U.S. Nat. Mus. xxxii. p. 319 (1900) ; Robinson, p. 213.

We have not as yet ourselves obtained this species from Trang, but have before us a pair of the typical series collected by Dr. Abbott on Khau-nom-plu, a mountain in the State about 3000 feet high.

The species differs from *Æ. wrayi*, of the mountains of Perak, Selangor, and Pahang, only in lacking the yellow rump-band. The females of the two species are indistinguishable. *Æ. saturata*, with which its describer compared it, is a very much larger bird than *Æ. anomala*.

253. *ANTHOTHREPTES SIMPLEX*.

*Anthothreptes simplex* (S. Müll.) ; Gadow, tom. cit. p. 114.

*Anthreptes xanthochlora* Hume, Stray Feathers, iii. p. 320 (1875).

♂. Chong, Trang, N. Malay Peninsula, 9th December, 1909.

Iris chestnut-red ; bill black ; feet greenish, with soles yellowish.

This plain-coloured Sun-bird is a decidedly rare species in the Malay Peninsula, but is sparingly distributed from the northern border south to Klang in Selangor. It does not appear to have been obtained up to the present in Johor, and the Hume collection contains no specimens from that State. It is met with usually in pairs, and not in open country like its congener *A. malaccensis*.

The type of *A. xanthochlora* from Tenasserim is a rather small female, with the upper surface strongly tinged with yellow. It can, however, be matched by specimens from other parts of the range of *A. simplex*, and is probably an immature bird.

254. ANTHOTHREPTES HYPOGRAMMICA.

*Anthothreptes hypogrammica* (S. Müll.); Gadow, tom. cit. p. 112; Robinson, p. 213.

Scarce in Trang, where it is approaching its northern limit, but widely distributed throughout the Peninsula.

255. ANTHOTHREPTES RHODOLÆMA Shelley.

*Anthothreptes rhodolæma* Shelley, Mon. Nect. p. 313, pl. 101. fig. 1 (1878).

*Anthothreptes malaccensis* (partim) Gadow, tom. cit. p. 123.

This species, which is very different from the commoner *A. malaccensis* and at once distinguishable by the darker olive-green colour of the belly and the reddish ear-coverts, was exceedingly abundant at Chong, feeding in large numbers on trees in flower in the park.

It appears to be commoner in the northern districts, but is found sparingly throughout the Peninsula, south to Singapore, and whereas *A. malaccensis* is always found either near the sea or on cocoanut palms, the present form is met with further up country, and always in jungle or forest land.

256. ANTHOTHREPTES MALACCENSIS.

*Anthothreptes malaccensis* (Scop.); Gadow, tom. cit. p. 122.

Abundant in the cocoanut-groves of the Langkawi group.

## 257. LEPTOCOMA HASSELTII.

*Cinnyris hasselti* (Temm.); Gadow, tom. cit. p. 67.

Not rare along the coast and islands of the Malay Peninsula, but seldom, if ever, seen at any considerable distance inland.

Abundant at Pulau Terutau in December 1907 and March 1909, and met with sparingly at Trang.

## 258. CYRTOSTOMUS PECTORALIS.

*Cinnyris pectoralis* (Horsf.); Gadow, tom. cit. p. 83.

Both this and the following species are found in the northern parts of the Peninsula, *C. flammixillaris* being not uncommon in the Langkawi group, while both occur in Trang.

## 259. CYRTOSTOMUS FLAMMAXILLARIS.

*Cinnyris flammixillaris* (Blyth); Gadow, tom. cit. p. 83.

## 260. ARACHNOTHERA LONGIROSTRIS.

*Arachnothera longirostris* (Lath.); Gadow, tom. cit. p. 103; Robinson, p. 213.

Only two or three specimens of this species were obtained. In the central and southern portions of the Peninsula it is very abundant, together with *A. modesta*, especially in the banana-plantations.

## 261. ARACHNOTHERA MODESTA.

*Arachnothera modesta* (Eyton); Gadow, tom. cit. p. 107; Robinson, p. 214.

Quite the commonest species in the Peninsula generally.

Very few, however, were met with in Trang, the larger and more powerful *A. robusta* and *A. flavigaster* appearing to monopolize the flowering trees, whence we obtained the majority of our specimens of this genus.

## 262. ARACHNOTHERA CHRYSOGENYS.

*Arachnothera chrysoGENYS* Temm.; Gadow, tom. cit. p. 108.

Rather rarer in Trang than the other members of the genus and nowhere very abundant.

263. ARACHNOTHERA FLAVIGASTER.

*Anthreptes flavigaster* Eyton, P. Z. S. 1839, p. 105 (Malacca).

*Arachnothera eytonii* Salvad. Ann. Mus. Civ. Gen. v. p. 132 (1874) (Borneo).

*Arachnothera simillima* Hume, Stray Feathers, v. p. 487 (1877); id. op. cit. vi. p. 171 (1878).

Common along with other species of the genus in the park at Chong in December 1909. We have examined the type and two other specimens of *Arachnothera simillima*, all "Malacca" trade-skins. The characters in the bill on which the species is founded are obviously due to immaturity. Parallel cases occur in other species of the genus.

264. ARACHNOTHERA ROBUSTA.

*Arachnothera robusta* Müll. et Schleg.; Gadow, tom. cit. p. 101.

Quite common in Trang, but decidedly rare throughout the rest of the Peninsula, the British Museum possessing only three specimens, viz. from South Perak, Selangor, and Malacca.

DICÆIDÆ.

265. DICÆUM CRUENTATUM.

*Dicæum cruentatum* (Linn.); Sharpe, Cat. Birds Brit. Mus. x. p. 15 (1885).

Rather scarce, though a few specimens were met with at Chong. The species is in the main an inhabitant of the coastal zone, and becomes much rarer in the inland districts.

266. DICÆUM TRIGONOSTIGMA.

*Dicæum trigonostigma* (Scop.); Sharpe, tom. cit. p. 38; Robinson, p. 214.

The commonest species of the family in Trang.

267. DICÆUM CHRYSORRHEUM.

*Dicæum chrysorrheum* Temm.; Sharpe, tom. cit. p. 44.  
Rather rare.

## 268. PRIONOCHILUS IGNICAPILLUS.

*Prionochilus ignicapillus* (Eyton); Sharpe, tom. cit. p. 65.

## 269. PRIONOCHILUS MACULATUS.

*Prionochilus maculatus* (Temm.); Sharpe, tom. cit. p. 69; Robinson, p. 215.

The species of this genus were not nearly so common as those of *Dicaeum*, and were harder to get, as they seemed to frequent loftier trees.

## 270. PIPRISOMA MODESTUM.

*Prionochilus modestus* (Hume); Sharpe, tom. cit. p. 32.

*Piprisoma modestum* Oates, Faun. Brit. Ind., Birds, ii. p. 383 (1890).

A single specimen was obtained among numerous others of the family at Chong in December. It is probably not uncommon in the State, as Dr. Abbott also obtained it, but from its sombre and inconspicuous coloration it is very liable to escape notice. The present locality is the most southerly recorded for the species, which certainly does not occur in that portion of the Malay Peninsula under British influence.

## ZOSTEROPIDÆ.

## 271. ZOSTEROPS TAHANENSIS.

*Zosterops tahanensis* Grant, Bull. B. O. C. xix. No. cxxvii. p. 10 (1906); Robinson, p. 215.

Very numerous at Chong on one particular tree, in company with large numbers of Bulbuls, Flower-peckers, and Sun-birds.

The species was originally described by Mr. Grant from a single specimen obtained on Gunong Tahan at an altitude of about 5000 feet, but it has since been found at several localities along the main range at lower elevations.

Nine specimens before us differ from *Z. aureiventer* Hume in the characters stated by Mr. Grant, while in

addition the yellow of the throat is very much duller and the white ring round the eye somewhat narrower.

From *Z. palpebrosa*, which also occurs in the Peninsula, the species is at once differentiated by the yellow mesial streak on the abdomen and the absence of a yellowish-orange tinge on the forehead and in front of the eye.

III.—*List of Birds collected in Argentina, Paraguay, Bolivia, and Southern Brazil, with Field-notes.* By CLAUDE H. B. GRANT, M.B.O.U.—Part I. PASSERES.

(Plate II.)

THE collections on which this paper is based were made in various localities in Argentina, Paraguay, and Southern Brazil (see map, Plate II.). At Los Ynglases I collected in the Ajó district, some fifty miles to the south of Buenos Aires, between September 1908 and June 1909, and from December 11th, 1909, to March 11th, 1910, on behalf of the British Museum and Mr. Ernest Gibson, F.Z.S. I also visited the following localities in Northern Argentina, Paraguay, and the Matto Grosso district of Brazil (where I accompanied Mr. G. W. Tudor in his steam-launch 'Leda,' on an expedition up the Rio Paraná and Rio Paraguay), between the end of July and the middle of November 1909, when we proceeded as far north as Corumba in Matto Grosso :—

*Northern Argentina.*—Rosario, Santa Elena, Esquina, Goya, Bella Vista, Riacho Ancho, Colonia Mihanovitch.

*Paraguay.*—Humaita, Tayru, Villa del Pilar, Tebicuari, Arjerichi, Villa Franca, Villa Oliva, Mortero, Santa Rosa, Villeta, Monte Alto, Maseras, Puerto San Juan, Puerto Asir, Curuzu Chica, Sapatero Cué, Puerto Pinasco, Colonia Risso, Cerro Concurencia, Puerto Maria, Puerto Medano, Fuerte Olimpo, Cabo Emma, and Bahia Negra.

*Bolivia.*—The few miles of the river-bank that have now